



GP:50 Aerospace Heritage products can be designed to meet various MIL Specifications. Consult factory.

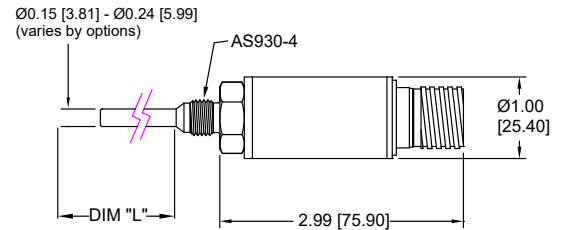
MODEL 7800 TEMPERATURE TRANSDUCER



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

L = 0.50 TO 7.00 INCH PROBE LENGTH



Standard configurations shown. Please consult factory for other options.

PRODUCT OVERVIEW:

GP:50's 7800 series temperature transducer provides reliable temperature measurement from -100 °F to +500 °F (-73 °C to +260 °C) while withstanding the harsh conditions associated with space exploration. The compact size and rugged design are an excellent choice for on-board space flight or military vehicle applications.

FEATURES:

- Accuracy to $\pm 1\%$ FSO
- Ranges from -100 °F to +500 °F (-73 °C to +260 °C)
- Lightweight, 8 oz (0.2 kg)
- Rated to 2000 PSI (138 BAR) process pressure
- 2 second temperature response time
- Analog outputs

APPLICATIONS:

- Propulsion systems
- Military and defense applications
- Space flight vehicles
- Military vehicles

OPTIONS:

- Custom temperature probe lengths
- Pressure ratings to 10,000 PSI
- 4-20 mA, 0 to 5 Vdc, 0 to 10 Vdc output (4-wire isolated options)
- Hydrogen and LOX compatibility
- Remote electronics for 500 °F operation (see 7770)
- 100 or 1000 Ω 2 or 3 wire platinum RTD
- Various MIL-SPECS available. Consult factory.

GP:50 MODEL 7800

REFERENCE SPECIFICATIONS

(Standard configurations shown, consult factory for other options)

ELECTRICAL	
Output Signal:	4-20 mA 0 to 5 Vdc or 0 to 10 Vdc (isolated options) 100 Ω 2-wire platinum RTD standard 1,000 Ω 2-wire platinum RTD optional (3 & 4 wire options)
Excitation Voltage:	10 to 36 Vdc (Options may affect this)
Response Time:	<2 sec

MATERIALS OF CONSTRUCTION	
Probe:	17-4 PH (Inconel, Monel or Nitronic 50 available) (Process pressure may affect material)
Housing:	316 Stainless Steel
O-Ring:	Buna-N (Nitrile) is standard (Consult Factory for other materials)

ACCURACY	
Standard:	$\pm 0.2\%$ FSO (BFSL)
Improved:	$\pm 0.10\%$ FSO
Zero/Span Balance:	$\pm 1\%$ FSO Each

(BFSL method used. Improved options available.)

Calibration:	NIST Traceable Cert
Workmanship:	IPC-A-610 Soldering
Quality System:	ISO 9100

Options may affect specifications.
Please consult factory for your specific needs.

MECHANICAL	
Process Connection:	AS930-04
Electrical Connection:	MIL PTIH-10-6P standard, options available
Probe Length:	1.55" (other lengths available)
Probe Pressure Rating:	2,000 PSI (Ranges to 10,000 PSI available)
Approximate Weight:	10 oz (0.2 kg) some options may affect weight

TEMPERATURE RANGES	
From -100 °F to +500 °F (-73 °C to +260 °C)	

SYSTEM PRESSURE	
Up to 2000 PSI (138 BAR), Optional 10K PSI (689 BAR)	

