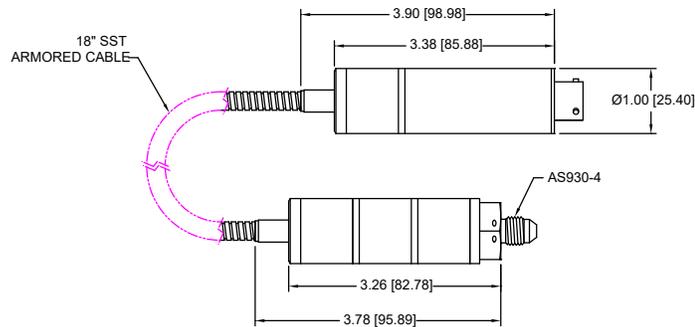


## MODEL 7780

### HIGH-TEMPERATURE PRESSURE 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	SHUNT (OPT.)	SHUNT (OPT.)
F/6	SHUNT (OPT.)	SHUNT (OPT.)

**REF DIMENSIONS ONLY.  
CONSULT FACTORY FOR ACTUAL DIMENSIONS.**

#### PRODUCT OVERVIEW:

The Model 7780 Series from GP:50 is a family of high-temperature pressure transducers, offering consistent measurement accuracy in temperatures up to +350 °F (+177 °C). The Series features a lightweight, all stainless steel construction with choice of either 4-20 mA, 0 to 5 Vdc, or 0 to 10 Vdc output; or optional digital protocols. On-board isolated transducer electronics are remotely mounted via stainless steel armor jacketed flex tubing. The high-reliability of the Model 7780 Series is field-proven over 25 years and hundreds of applications, including higher shock and vibration environments.

#### FEATURES:

- Process temperature rated to +350 °F (+177 °C)
- Remote electronics via stainless steel flex cable
- 4-20 mA Output
- Standard accuracy to +0.2% FSO BFSL

#### APPLICATIONS:

- Fuel and propulsion systems
- Military and defense
- High-temperature process media
- Aircraft engine test stands
- R&D laboratory research

#### OPTIONS:

- Digital outputs: CANbus, RS485 or USB
- 0-5 Vdc or 0 to 10 Vdc output (4-wire isolated option)
- Remote electronic cable lengths to 36"
- Zero and span adjustments
- Hydrogen or LXO compatibility options
- Cryogenic service down to -320 °F (-196 °C)
- (see GP:50 Model 7720)
- Various MIL-SPECS available. Consult factory.

# GP:50 MODEL 7780

## REFERENCE SPECIFICATIONS

(Standard configurations shown, consult factory for other options)

ELECTRICAL	
Output Signal:	4-20 mA 0 to 5 Vdc, 0 to 10 Vdc (isolated options) (CANbus, RS485 or USB options)
Excitation Voltage:	10 to 36 Vdc (Options may affect this)
Response Time:	<5 ms

MATERIALS OF CONSTRUCTION	
Wetted Parts:	17-4 PH (Inconel, Monel or Nitronic 50 available)
Housing:	316 Stainless Steel
O-Ring:	Flourosilicone is standard
Flex Tubing:	18" Armored flex (24" & 36" options)

ACCURACY (RSS): Hysteresis, Non-Linearity & Repeatability @ +70 °F	
Static Accuracy (RSS):	≤ ±0.3% FSO
Non-linearity:	≤ ±0.20% FSO (Typ)
Hysteresis:	≤ ±0.1% FSO (Typ)
Repeatability:	≤ ±0.1% FSO (Typ)
Zero Balance:	± 1.0% FSO
Span Balance:	± 1.0% FSO

(BFSL method used. Improved options available.)

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

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

MECHANICAL	
Process Connection:	AS930-4 pressure port
Electrical Connection:	D38999 standard, options available
Proof Pressure:	1.5X pressure range
Burst Pressure:	2X-5X range dependent, 22.5K PSI max
Approximate Weight:	<10 oz (0.2 kg)

PRESSURE RANGES	
0 to 300 thru 0 to 15K PSIA, PSIG or PSISG options (20 thru 1,034 BAR)	

THERMAL SPECIFICATIONS	
Operating Process:	-65°F to +350 °F (-54 °C to +177 °C)
Operating Ambient:	-65°F to +250 °F (-54 °C to +121 °C)
Compensated Range:	+70 °F to +350 °F (+21.1°C to +177 °C)
Effect on Zero & Span:	± 1.0% FSO/100 °F (Improved specifications available)

