



FLIGHT / SPACEFLIGHT QUALIFIED HIGH-ACCURACY PRESSURE TRANSDUCER

MODEL 7201

FEATURES:

- Space flight qualified per MSFC-HDBK-527
- Class "S" qualified electronics
- Radiation hardened to 40 KRAD
- Measurement accuracy to $< \pm 0.3\%$ FSO (RSS)
- 0-5 Vdc output
- Designed to meet 7-year LEO requirements
- Compact, lightweight design weighs just 5 oz (0.1 kg)
- Packaging qualified to FED-STD-101 Method 5005/5007

APPLICATIONS:

- Commercial and defense satellites
- Unmanned aerial vehicles
- Onboard aircraft systems
- Avionics
- Spacecraft and launch vehicles

PRODUCT OVERVIEW:

The Model 7201 from GP:50 is a high-accuracy, low-noise, flight-qualified pressure transducer, designed to provide high-reliability within demanding aerospace environments. The exceptional durability and performance of this transducer has been field proven over more than 25 years and across hundreds of applications.

FIELD OPTIONS:

- "B+ and S Class" electronics
- AS5202-04, AS4395E04 process connections
- D38999/27YB98PN, D38999/27YA35PN electrical connectors
- 0 to 5 Vdc 3-wire hookup, or non-isolated 4-wire hookup



Model 7201
Flight/Spaceflight Qualified High-Accuracy
Pressure Transducer

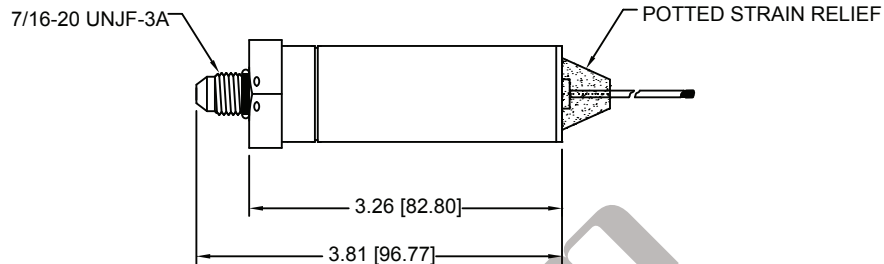
GP:50 MODEL 7201

DIMENSIONAL DRAWING

All dimensions are in inches (mm)

STANDARD WIRING

PIN	MODEL 7201
ORG	+15 VDC EXC
GRN	+OUTPUT
WHT	-OUTPUT
BLU	-EXC



REFERENCE SPECIFICATIONS

ELECTRICAL

- **Output Signal:** 0 to 5 Vdc
- **Supply Voltage:** 15 Vdc + 50 mV regulated
- **Input Current:** 25 mA nominal
- **Output Current:** 2 mA max for <0.1% FSO attenuation
- **Circuit Protection:** Design meets MIL-STD-461/EMI/RFI (some options may affect rating) reverse polarity protection
- **Response Time:** <4 ms
- **Connection:** Tefzel cable with 4-conductor 32 AWG wire

ACCURACY (HYSTERESIS, NON-LINEARITY & REPEATABILITY @ +70 °F)

- **Static Accuracy (RSS):** $\leq \pm 0.3\%$ FSO
- **Zero/span balance:** $\pm 0.5\%$ FSO
- **Non-repeatability:** $\leq \pm 0.1\%$ FSO
- **Hysteresis:** $\leq \pm 0.2\%$ FSO
- **Non-linearity:** $\leq \pm 0.2\%$ FSO
- **Thermal Error:** $\pm 0.4\%$ FSO over center
- **Total Error Band:** $\pm 1.0\%$ FSO (includes all 5 parameters)

MATERIALS OF CONSTRUCTION

- **Wetted Parts:** Inconel 718 sensor, Inconel 625 port
- **Housing:** 316L stainless steel

MECHANICAL

- **Process connection:** AS4395E04 standard, AS5202-04, 1/4" NPT (M) optional
- **Proof Pressure:** 1.5X FSO
- **Burst Pressure:** 2.5X FSO
- **Secondary containment:** Rated at 4,500 PSI (310 BAR) for ranges ≥ 50 PSI; 2,400 PSI (166 BAR) for ranges <50 PSI
- **Random Vibration:** >70 G RMS (20 Hz to 2,000 Hz)
- **Sinusoidal Vibration:** 7.0 G's from 5 Hz to 100 Hz
- **Pyroshock:** >4,000 G's / 12 g
- **Constant Acceleration:** 5 G's for 30 minutes
- **Approximate Weight:** 5 oz (0.1 kg)

PRESSURE RANGES

- 0 to 50 thru 0 to 15K PSIA (3.4 thru 1,034 BAR)

THERMAL SPECIFICATION

- **Compensated:** -4 °F to +104 °F (-20 °C to +40 °C)
- **Operating:** -75 °F to +250 °F (-60 °C to +120 °C)
- **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.