MODEL 8200

FEATURES:

- High accuracy, up to 0.05% available
- 10X overload option
- 0 to 5 Vdc, or 0 to 10 Vdc or 4-20mA output
- 4 wire isolated output option
- Secondary containment rated at 4,500 PSI (310 BAR) for ranges ≥300 PSI

APPLICATIONS:

- Aviation and suborbital spacecraft
- Unmanned aerial vehicles
- Helicopter and rotorcraft
- Commercial and military satellites
- Launch vehicles
- Ground and engine testing

PRODUCT OVERVIEW:

The Model 8200 series from GP:50 is a flight heritage, high level pressure transducer. Digitally corrected to provide high-accuracy pressure measurements with a proprietary sensor design for added zero stability for commercial aviation, military, aerospace, UAV, satellite, and defense applications.

FIELD OPTIONS:

- 0 to 5 Vdc, 0 to 10 Vdc and 4-20 mA outputs (Isolated output options available)
- Temperature output
- Optional wetted materials available
- O2 cleaning to MIL-STD-1246 available
DIMENSIONAL DRAWING
All dimensions are in inches (mm)

ELECTRICAL

- Supply Voltage: 9 to 36 Vdc (some options may affect this)
- Output Signal: 0 to 5 Vdc, 0 to 10 Vdc, 4-20mA
- Load Resistance:
  - Voltage Output: 100K Ω min.
  - Current Output: 1150 Ω max. at 32 Vdc
- Circuit Protection: 500 Hz
  - Revers polarity protected

ACCURACY

- Static Accuracy: ±0.1% FSO with ±0.05% available
- Non-repeatability: <±0.04 FSO
- Hysteresis: <±0.05 FSO
- Thermal Error: ±0.225% FSO/100 °F
- Total Error Band: ±0.5% FSO

MATERIALS OF CONSTRUCTION

- Wetted Parts: Ranges ≤100 PSI: 316L SST; >100 PSI: 17-4 PH SST (Inconel, Hastelloy optional)
- Housing: 316L stainless steel

PRESSURE RANGES

- 0 to 3 thru 0 to 15K PSIA, PSIG, PSIV, PSISG options
  (0.2 thru 1,034 BAR)

MECHANICAL

- Process Connection: AS4395E04 standard. Other available, consult factory.
- Proof Pressure: 1.5X FSO (25 PSIA min.) 10X optional
- Burst Pressure: 3.0X FSO
- Secondary containment: Rated at 4,500 PSI (310 BAR) for ranges ≥300 PSI
- Random Vibration: >25 G RMS (20 Hz to 2,000 Hz)
- Sinusoidal Vibration: 7.5 G’s from 5 Hz to 100 Hz
- Pyroshock: >3,500 G’s / 12 g
- Shock: 100 G’s Peak to peak
- Constant Acceleration: 12 g
- Approximate Weight: <5 oz (0.1 kg) some options may affect weight

THERMAL SPECIFICATION

- Compensated: -10 °F to +180 °F (-23 °C to +82 °C)
- Operating Ambient: -20 °F to +190 °F (-29 °C to +88 °C)
- NIST Traceability/Calibration: ANSI-Z540-1
- Workmanship: J-001/NASA 8739.3 standard

REFERENCE SPECIFICATIONS

© 2014 GP:50 NY Ltd. | 2770 Long Rd, Grand Island, NY 14072 USA
Tel: +1.716.773.9300  Fax: +1.716.773.5019  Email: sales@gp50.com  Web: www.gp50.com

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