MODEL 7200

FEATURES:
- Up to ±0.1% FSO accuracy (RSS)
- “B+” and “S Class” electronics available
- Secondary containment rating up to 4,500 PSI (310 BAR)
  Optional 10X proof pressure
- 0 to 1 thru 0 to 15K PSI (69 MBAR to 1,034 BAR)
  Designed to meet MIL-STD-810F* high shock and vibration specifications
- Full NIST traceability
- J-001/NASA 8739.3 standard workmanship

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 7200 series from GP:50 is a flight heritage static pressure transducer, designed to provide high-accuracy pressure measurements within commercial aviation, military, aerospace, UAV, satellite, and defense applications. This highly rugged pressure transducer is designed to meet both MIL-STD-461* and MIL-STD-810G* standards. It is available in both test and program volumes to suit a variety of requirements.

FIELD OPTIONS:
- 0 to 5 Vdc, 0 to 10 Vdc and 4-20 mA outputs
  (Optional 4-wire isolated grounds on Vdc Units)
- “B+ and S Class” electronics
  Temperature output
- Inconel, Hastelloy, and Monel wetted parts
  Wide selection of pressure ports and electrical connections
- Improved Static Accuracy to ±0.05% FSO see Model 8200.
DIMENSIONAL DRAWING
All dimensions are in inches (mm)

STANDARD WIRING

<table>
<thead>
<tr>
<th>PIN</th>
<th>4-20mA</th>
<th>4-WIRE VDC ISOLATED</th>
<th>4-WIRE VDC NON-ISOLATED</th>
<th>3-WIRE VDC</th>
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<td>A/1</td>
<td>+EXC/SIG</td>
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<td>-SIG</td>
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<td>N/C</td>
<td>N/C*</td>
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</table>

NOTE: LENGTH MAY VARY ON RANGES BELOW 50 PSI

REFERENCE SPECIFICATIONS

ELECTRICAL

Output Signal: 0 to 5 Vdc, 0 to 10 Vdc and 4-20 mA
Supply Voltage:
9 to 32 Vdc (0-5 Vdc output), 14-32 Vdc (0-10 Vdc output)
9 to 32 Vdc (4-20 mA output)
Load Impedance:
1,350 Ω max. at 36 Vdc
750 Ω max. at 24 Vdc
300 Ω max. at 18 Vdc
Output Current (0 to 5 Vdc): 2 mA max for <0.1% FSO attenuation
Input Current: 4 wire isolated Vdc output - 45 mA nominal, non-isolated Vdc -10 mA nominal
Response Time: <2 ms typical
Connection: D38999/27YA35PN standard, options available

ACCURACY

Static Accuracy (RSS): <±0.3 FSO and ±0.10 FSO and
Zero/span balance: ±0.5% FSO
Non-repeatability: < ±0.2% FSO
Hysteresis: < ±0.1% FSO
Non-linearity: < ±0.2 FSO
Total Error Band: ±1.3% FSO

MATERIALS OF CONSTRUCTION

Wetted Parts: 17-4 PH sensor (<50 PSI 316L stainless steel) (Inconel, Hastelloy, and Monel optional)
Housing: 316L stainless steel
Pressure ranges: < 50 PSI contain silicon or fomblin oil

*Mechanical

Process connection: AS4395E04 standard. Consult factory for other options
O-Ring: Buna-N (Nitrile) is standard. For expanded temp ranges -65 °F to 350 °F Fluorosilicone is standard.
Proof Pressure: 1.5X FSO, 10X optional
 Burst Pressure: 3.0X FSO, 15X optional
Secondary containment: Rated at 4,500 PSI (310 BAR) for ranges ≥50 PSI; 2,400 PSI (166 BAR) for ranges <50 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: >2,500 G’s / 12 g
Constant Acceleration: 5 G’s for 30 minutes
Weight: <8 oz (<0.2 kg) some options may affect weight

PRESSURE RANGES

• 0 to 1 thru 0 to 15K PSIA, PSIG, PSIV, PSISG options (0.1 thru 1,034.2 BAR)

THERMAL SPECIFICATION

Operating: -75 °F to +260 °F (-59 °C to +127 °C)
Compensated: -10 °F to +180 °F (-23 °C to +82 °C)
Thermal Error: ±0.5% FSO/100 °F (±0.25% FSO improved)
Expanded Option: -65 to +250 °F (±1.0% FSO/100 °F)
NIST Traceability/Calibration: ANSI-Z540-1
Workmanship: J-001/NASA 8739.3 standard

*Some options may invalidate Mil-specifications.
Please consult factory for your specific needs.

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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