



FLIGHT QUALIFIED DIGITALLY CORRECTED PRESSURE TRANSDUCER



Model 8200
Flight Qualified Digitally Corrected
Pressure Transducer

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 qualified, 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. This highly rugged pressure transducer utilizes RS-232 controlled zero span adjustment is available in both test and program volumes to suit a variety of requirements.

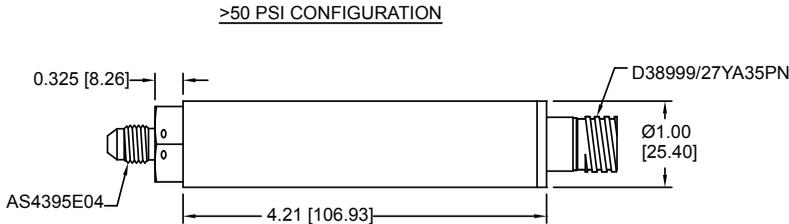
FIELD OPTIONS:

- 0 to 5 Vdc, 0 to 10 Vdc and 4-20 mA outputs (Isolated output options available)
- Temperature output
- Optional wetted materials available
- O2 cleaning to MIL-STD-1246 available

GP:50 MODEL 8200

DIMENSIONAL DRAWING

All dimensions are in inches (mm)



STANDARD WIRING

PIN	4-20mA	4-WIRE VDC ISOLATED	4-WIRE VDC NON-ISOLATED	3-WIRE VDC
A/1	+EXC/SIG	+EXC	+EXC	+EXC
B/2	N/C	+SIG	+SIG	+SIG
C/3	N/C	-SIG	-SIG*	N/C
D/4	-EXC/SIG	-EXC	-EXC*	-EXC/SIG
E/5	N/C	N/C	N/C	N/C
F/6	N/C	N/C	N/C	N/C

*COMMONS JUMPERED

REFERENCE SPECIFICATIONS

ELECTRICAL	MECHANICAL
<ul style="list-style-type: none"> • Output Signal: 0 to 5 Vdc, 0 to 10 Vdc digitally corrected • Supply Voltage: +12 V, +15 V (regulated), 18 to 36 Vdc (unregulated) • Response Time: 500 Hz • Connection: PTIH-10-6P standard, Other options available 	<ul style="list-style-type: none"> • Process connection: AS5202-04 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
ACCURACY	THERMAL SPECIFICATION
<ul style="list-style-type: none"> • Static Accuracy: $\pm 0.1\%$ FSO with $\pm 0.05\%$ available • Non-repeatability: $< \pm 0.04$ FSO • Hysteresis: $< \pm 0.05$ FSO • Thermal Error: $\pm 0.225\%$ FSO/100 °F • Total Error Band: $\pm 0.5\%$ FSO 	<ul style="list-style-type: none"> • 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 • Quality System: ISO 9001:2008
MATERIALS OF CONSTRUCTION	
<ul style="list-style-type: none"> • Wetted Parts: Ranges ≤ 100 PSI: 316L SST; >100 PSI: 17-4 PH SST (Inconel, Hastelloy optional) • Housing: 316L stainless steel 	
PRESSURE RANGES	
<ul style="list-style-type: none"> • 0 to 3 thru 0 to 15K PSIA, PSIG, PSIV, PSISG options (0.2 thru 1,034 BAR) 	

**Standard configurations shown.
Please consult factory for other options.**

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.