

# **AEROSPACE**



# MODEL 8200 FLIGHT HERITAGE DIGITALLY CORRECTED PRESSURE TRANSDUCER





#### 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 IIIMDEDI

REF DIMENSIONS ONLY.
CONSULT FACTORY FOR ACTUAL DIMENSIONS.

#### **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.

#### **FEATURES:**

- 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)

### **APPLICATIONS:**

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

#### **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
- Various MIL-SPECS available. Consult factory.

**A5SL-063** REV-G

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## **GP:50 MODEL 8200**

#### REFERENCE SPECIFICATIONS

## (Standard configurations shown, consult factory for other options)

ELECTRICAL	
Output Signal:	0 to 5 Vdc, 0 to 10 Vdc, 4-20 mA
Excitation Voltage:	9-32 Vdc for 4-20 mA and 0-5 Vdc non- isolated output, 14-32 Vdc for 0-10Vdc and 0-5Vdc isolated output
Circuit Protection:	EMI/RFI, some options may affect EMI/RFI rating
Response Time:	<4ms

MATERIALS OF CONSTRUCTION		
Wetted Parts:	Ranges <2000 PSI: 316L SST; >2000 PSI: 17-4 PH SST (Inconel, Hastelloy optional)	
Housing:	316L Stainless Steel	
Internal Fill:	<2000 PSI - Fomblin filled sensor	

ACCURACY (BFSL): Hysteresis, Non-Linearity & Repeatability @ +70 °F)		
Static Accuracy (RSS):	≤±0.15% FSO	
Non-Linearity:	≤±0.05% FSO (Typ)	
Hysteresis:	≤±0.1% FSO (Typ)	
Repeatability:	≤±0.1% FSO (Typ)	
Zero Balance:	±0.5% FSO	
Span Balance:	±0.25% FSO	

(BFSL method used. Improved options available.)

Calibration:	NIST Traceable Cert
Workmanship:	IPC-A-610 Soldering
Quality System:	ISO 9001

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

MECHANICAL		
Process Connection:	AS4395E04 standard, optional pressure ports available	
Electrical Connection:	PTIH-10-6P standard, options available	
Proof Pressure:	2.0X FSO	
Burst Pressure:	5.0X FSO (22.5K PSI max)	
Secondary Containment:	Rated at 4,500 PSI (310 BAR)	
Random Vibration:	>25 G RMS (20 Hz to 2,000 Hz) (options available)	
Pyroshock:	100 G half-sine shock pulse over 11msec (options available)	
Constant Acceleration:	5 G's for 30 minutes	
Approximate Weight:	4 oz (0.1 kg) some options may affect weight	

#### **PRESSURE RANGES**

0-1 PSIG, 0-3 PSIA thru 0-7500 PSI max options (69 mBAR thru 517 BAR)

THERMAL SPECIFICATIONS				
Operating Range:	-40°F to +250 °F (-40 °C to +121 °C)			
Compensated Range:	0 °F to +180 °F (-17 °C to +82 °C)			
Compensated Ranges from -65 °F to +250 °F (-54 °C to +121 °C) available				
Thermal Error:	$\pm 0.5\%$ FSO/100 °F (Improved specifications available)			

