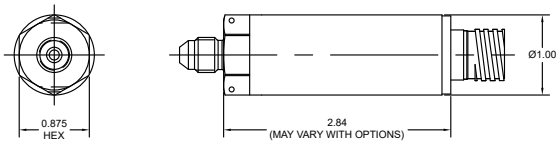
GP:50

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 JUMPERED

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.

© 2014 GP:50 NY Ltd. | 2770 Long Road, Grand Island, NY 14072 USA

Tel: +1.716.773.9300 **Fax:** +1.716.773.5019 **Email:** sales@gp50.com **Web:** www.gp50.com

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:	≤1000 PSI: 316L SST >1000 PSI: 17-4 PH SST (Inconel, Hastelloy optional)
Housing:	316L Stainless Steel
Internal Fill:	≤1000 PSI Fomblin oil (May contain Silicone)

ACCURACY (RSS): 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:	AS9100

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) *(Ranges below 1,000 PSI may require oil-filled sensor, consult factory)*

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:	±0.5% FSO/100 °F (Improved specifications available)

AEROSPACE

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

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.