

Model 2000 Precision Barometric Pressure Transducer

- Transmitter is customized to your specific atmospheric requirements
- Transmitter output is digitally mapped to enhance accuracy at any specific Temperature or Pressure range.
- Multiple Outputs – 4-20mA, 0-5V, 0-10V, RS232, RS485 and USB 2.0
- Accuracies to 0.03% BFSL
- 24.4" to 34.6" HgA range (custom ranges available. See page 2)
- Optional analog temperature outputs
- Optional USB connectivity



DESCRIPTION

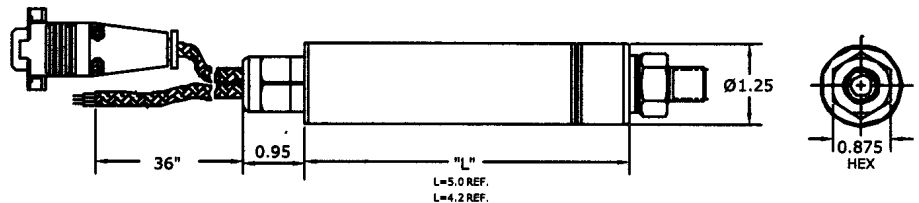
Spectre's Precision Series 2000 Pressure Transducers offer the first available sensors that are manufactured, designed and calibrated to each customer's specific operating conditions. Each transducer **output is digitally mapped** to correct for any non-linearities or inaccuracies in the sensor. This digital correction and the inherent advantages of the fused bond sensor provide the most accurate and flexible transducer in the industry.



FEATURES

- Proprietary Fused Bond Sensor
- Accuracy 0.05% to 0.03% BFSL
- RFI/EMI Protection
- Digital Temperature Correction at operating conditions
- Sensor Wetted Material Machined From Solid Stainless Steel Bar Stock (No Welds)
- Unparalleled Long Term Stability

DIMENSIONS



Model 2000 Barometric Pressure Transducer

Ordering Guide – Example 2000-A-(Baro)-D-1-05-EC1

Please inquire for specials or options

A	(Baro)	A	1	05	EC1
Pressure Port	Range	Pressure Output	Temp Output	Accuracy	Connector
A=1/4"MNPT B=SAE-4 C=other	Baro=24.4" to 34.6" HgA** (12-17 PSIA)	D=4-20mA E=0-5VDC F=0-10VDC G=RS232 H=RS485 X=Other UC=USB (computer powered)***	0=None 1=4-20mA 2=0-5VDC 3=TC 4=RTD (1000 Ohm)	05=0.05% BFSL 03=0.03% BFSL	EC1=36" pigtail EC2=DIN 43650 with mate. Large EC3=Mini DIN DB9=DB9 serial connector USB=USB "A"## ECX=Other

**Optional ranges available from 16" HgA (lower limit) to 35" HgA (upper limit)

***Analog outputs not available with "UC" pressure output

##USB only used when "UC" pressure output specified.

Performance @ 25°C (77°F)

Accuracy: $\leq \pm 0.05\%$ BFSL (optional 0.03%)
Stability (2 year): $\pm 0.05\%$ FS, typical
Over range protection: 2X Rated Pressure
Burst Pressure: 2.5X Minimum
Pressure Cycles: >50 Million
Temperature Range: -55 to 85°C (-65 to 185°F)
Temperature Accuracy: $\pm 1^\circ\text{F}$ ($\pm 1/2^\circ\text{C}$)

Electrical Data

Excitation: 14-36Vdc (0-10Vdc), 9-36Vdc (4-20mA and 0-5Vdc) Option C29 – Maximum 29 Vdc excitation
Comms Output: Serial RS485, RS232 , USB 2.0
Current Consumption: <25mA
Zero Offset: $\leq \pm 0.2\%$ of FS
Span Tolerance: $\leq \pm 0.2\%$ FS
Output load: > 10K Ohm

Environmental Data

Temperature
Operating: -40 to 85°C (-40 to 185°F)
Storage: -50 to 125°C (-60 to 250°F)
Thermal Limits
Compensated Range: 0 to 55°C (-32 to 130°F)
Temp Comp Zero: $\leq \pm 0.2\%$ FS
Temp Comp Span: $\leq \pm 0.2\%$ FS

Physical Data

Sensor: Wetted Material 17-4 pH SS (others on request)
Pressure Connection: 1/4" MNPT (others on request)
Electrical Connection: Cable, DIN, Bendix, Cannon. Others on application

Applications

The Model 2000's precision calibration.(digitally mapping the output to the specific application temperature and pressure conditions) make the 2000 the ultimate choice for any high accuracy barometric applications.



Spectre Sensors

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