

## 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

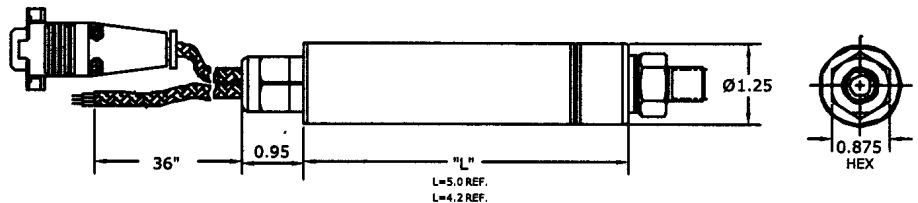
Spectre's Precision Series 2000 Pressure Transducers offer the first available sensors that are manufactured, designed and calibrated to each customer's specific operating conditions. Each transducer **output is digitally mapped** to correct for any non-linearities or inaccuracies in the sensor. This 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: <math>\pm 0.05\% \text{BFSL}</math> (optional 0.03%)
Stability (2 year): <math>\pm 0.05\% \text{FS}</math>, 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: <math>\pm 1^\circ \text{F}</math> (<math>\pm 1/2^\circ \text{C}</math>)

### 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: <math>< 25 \text{mA}</math>
Zero Offset: <math>\pm 0.2\% \text{ of FS}</math>
Span Tolerance: <math>\pm 0.2\% \text{ FS}</math>
Output load: > 10K Ohm

### Environmental Data

<b>Temperature</b>
Operating: -40 to 85°C (-40 to 185°F)
Storage: -50 to 125°C (-60 to 250°F)
<b>Thermal Limits</b>
Compensated Range: 0 to 55°C (-32 to 130°F)
Temp Comp Zero: <math>\pm 0.2\% \text{ FS}</math>
Temp Comp Span: <math>\pm 0.2\% \text{ FS}</math>

### 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**

### Contact Information

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