

Model 9000 Precision Pressure Transducer

- Transducer is customized to your specific temperature and pressure conditions
- Outputs: 4-20mA, 0-5 Vdc, 0-10 Vdc. Optional 4-wire, isolated outputs and RS232/RS485 available.
- Pressure ranges 0-10" WC to 30,000 PSI
- Standard accuracy of 0.05% BFSL (optional 0.03%)
- Built-in, proprietary design, lightning and surge protection supplied as standard
- Unparalleled long-term stability
- Digital temperature correction at operating conditions
- Field rangeable 5:1

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Spectre's Series 9000 is the first available pressure transducer that is designed, manufactured and calibrated to each application's specific operating conditions. **Each transducer's output is digitally mapped to correct for any non-linearity or inaccuracies in the sensing element.** This digital correction provides the most accurate and flexible pressure transducer in the industry.

Performance @ 25°C (77°F)

Accuracy: $<\pm 0.05\%$ Best Fit Straight Line (BFSL)
Stability (2 year): $<\pm 0.05\%$ FS, typical
Over pressure protection: 2X Rated Pressure
Burst Pressure: 5X minimum
Pressure Cycles: >50 Million
Temperature range: -55 to $+70^{\circ}\text{C}$ (-65 to $+158^{\circ}\text{F}$)
Optional to $+100^{\circ}\text{C}$ ($+212^{\circ}\text{F}$)
Temperature Accuracy: $\pm 1^{\circ}\text{C}$ ($\pm 1^{\circ}\text{F}$)
Total Error Band: $\pm 0.2\%$ (includes zero, span, static accuracy and temperature)

Environmental Data

Storage temp: -50 to $+125^{\circ}\text{C}$ (-60 to $+250^{\circ}\text{F}$)
Compensated range: -40 to 50°C (-40 to $+125^{\circ}\text{F}$)
Optional: -55 to $+100^{\circ}\text{C}$

Temp comp Zero: $<\pm 1.5\%$ FS
Temp comp Span: $<\pm 1.5\%$ FS

Electrical Data

Excitation:

6.0-36 Vdc - 4-20mA output
9-36 Vdc - 0-5 Vdc output
14-36Vdc - 0-10 Vdc output
Option C29: Max 29 Vdc excitation

Optional serial comms: RS232 or RS485
Current consumption: $<15\text{mA}$
Output load: $>10\text{K Ohm}$

Physical data

Sensor wetted material: 17-4 PH SS – 316SS,
(others on application)
Body material: 304 or 316SS
Pressure connection: $\frac{1}{4}$ " Male NPT, SAE-4 male
(others on application)

Electrical Connection: 36' wiring leads, DIN, Bendix
Cannon (others on application)

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Ordering guide – Example: 9000-A-(0-150PSIG)-2-D-05-EC2

A	(0-150PSIG)	2	D	05	EC2
Pressure Port	Range	Units	Output	Accuracy	Connector***
A=1/4" MNPT B=SAE-4 C=Other D=1/8" MNPT E=Autoclave F-250-C	Specify pressure range in: PSI, BAR, kPa or inches WC.	1=Absolute 2=Gauge 3=Vacuum 4=Sealed 5=Compound 6=Other	D=4-20mA E=0-5VDC F=0-10VDC G=RS232** H=RS485** X=Other (4-wire, isolated versions available-contact factory)	05=0.05% BFSL* 03=0.03% BFSL*	EC1=36" pigtail EC2=DIN 43650 with mate – Large EC3=Mini DIN with mate EC4=Bendix 6-pin EC9=1/2" NPT with 36" leads ECX=Other

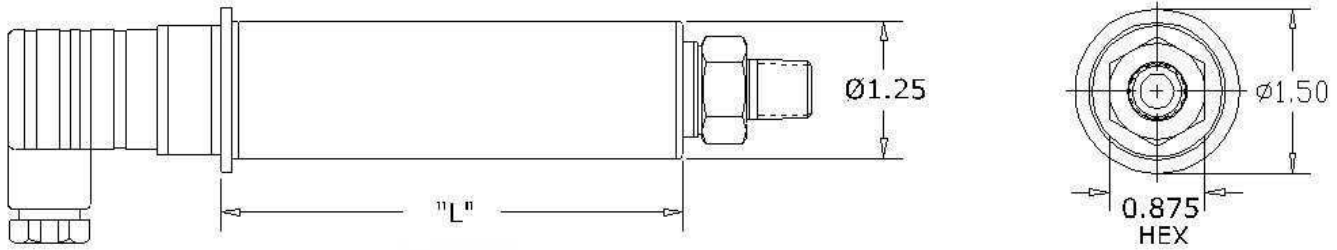
*BFSL = Best Fit Straight Line

**Combination 4-20mA + Comms available – consult factory

*** Some outputs may preclude use of certain connectors – consult factory for details

Note: Operating temperature must be specified at time of order placement.

Dimensions:



"L" = 4.3" in ranges >300 psi, 5.2" in ranges <300 psi.
Dimensions may vary with options

Current Output

Wiring	4-20mA, DIN 43650
Pin 1	+ excitation
Pin 2	- excitation/signal
Pin 3	no connection
Pin 4	no connection
Power	6-36 Vdc

Wiring	4-20mA, Cable
White	+ excitation
Black	- excitation/signal
Power	6-36 Vdc

Voltage Output

Wiring	Voltage, DIN 43650
Pin 1	+ excitation
Pin 2	- excitation/signal
Pin 3	+signal
Pin 4	no connection
Output	Power
0-5 Vdc	9-32 Vdc
0-10 Vdc	13-32 Vdc

Wiring	Voltage, Cable
Red	+ excitation
Green	+ signal
Black	- excitation/signal
White	no connection
Output	Power
0-5 Vdc	9-32 Vdc
0-10 Vdc	13-32 Vdc