

## ***Model 3000 Hydraulic Pressure Transducer***



- Designed specifically for applications where high shock and vibration are present
- Eliminate Drift – *Fused Bond Sensor* technology for long-term stability
- Sensor wetted material machined from solid stainless steel bar stock. No Silicone oil fill, no internal o-rings, no welded diaphragms!
- Eliminate Noise – Maximum RFI/EMI protection on every transducer
- Outputs - 4-20mA, 0-5V & 0-10V
- Pressure ranges 0-15 to 0-60,000 PSI
- Accuracies to 0.04% BFSL
- Unparalleled long-term stability
- Temperature compensation at the sensor element.



The rugged design of the Spectre Model 3000 Hydraulic Series pressure transducer makes it the ideal choice when application conditions such as high vibration, shock and temperature extremes are present. Typical applications for the Model 3000 are industrial OEM equipment, injection molding, die casting and hydraulic systems with pressure spikes or highly cyclic conditions.

### **Performance @ 25°C (77°F)**

Accuracy:  $<\pm 0.25\%$  BFSL (0.08% and 0.04% optional)  
Stability (1 year):  $<\pm 0.1\%$  FS, typical  
Over pressure protection: 4X Rated Pressure  
Burst Pressure: 6X minimum (higher on request)  
Pressure Cycles: >50 Million  
Temperature range: -40 to +100°C (-40 to + 212°F)  
Temperature Accuracy:  $\pm 1^\circ\text{C}$  ( $\pm 2^\circ\text{F}$ )

### **Environmental Data**

Operating temp: -40 to +100°C (-40 to +212°F)  
(Optional to +275°F, cons ult factory)  
Storage temp: -50 to +125°C (-60 to +250°F)  
Compensated range: 0 to 50°C (-32 to +125°F)  
Temp comp Zero:  $<\pm 1.5\%$  FS  
Temp comp Span:  $<\pm 1.5\%$  FS

### **Electrical Data**

Excitation:  
9-36 Vdc (4-20mA and 0-5 Vdc outputs)  
13-36 Vdc (0-10 Vdc output)  
Option C29: Maximum 29 Vdc excitation  
Current consumption:  $<5\text{mA}$  (voltage outputs)  
Zero offset:  $<\pm 0.25\%$  of FS – field adjustable  
Span tolerance:  $<\pm 1.0\%$  of FS  
Output load:  $>10\text{K Ohm}$

### **Physical data**

Sensor wetted material: 17-4 PH stainless (optional: 316)  
  
Pressure connection: 1/4 male NPT, SAE-4  
(others on application)  
  
Electrical Connection: Cable, DIN, Cannon, Bendix  
(Others available on application)

## Model 3000 Hydraulic Pressure Transducer

Ordering guide – Example: 3000-A-(0-500PSI)-2-D-25-EC2

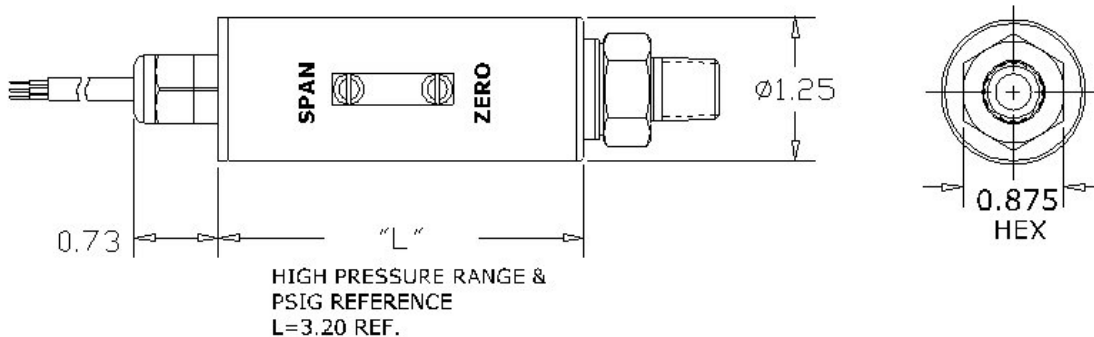
A	(0-500)	2	D	25	EC2
Pressure Port**	Range	Units	Output	Accuracy	Connector
A=1/4"MNPT B=SAE-4 C=other D=1/8"MNPT E=Autoclave F-250C**	Specify Pressure Range in PSI, BAR or kPa	1=Absolute 2=Gauge 3=Vacuum 4=Sealed 5=Compound 6=Other	D=4-20mA E=0-5VDC F=0-10VDC X=Other (4-wire, isolated versions available- contact factory)	25=0.25%BFSL* 08=0.08% 04=0.04%	EC1=36" pigtail EC2=DIN 43650 with mate. Large EC3=Mini DIN EC4=Bendix 6-pin EC9=1/2" NPT conduit connection w/leads ECX=Other

\*BFSL = Best Full Scale Line

\*\*Must be used on ranges above 0-10,000 PSI

External zero & span adjustments and calibration shunt resistor options available. Contact factory.

### Dimensions:



Wiring	4-20mA, DIN 43650
Pin 1	+ excitation
Pin 2	- excitation/signal
Pin 3	no connection
Pin 4	no connection
Power	9-32 Vdc

Wiring	4-20mA, Cable
White	+ excitation
Black	- excitation/signal
Power	9-32 Vdc

Wiring	Voltage, DIN 43650
Pin 1	+ excitation
Pin 2	+ signal
Pin 3	- excitation/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