



## Model 80 Submersible Transducer

- Proprietary Fused Bond sensor - No Silicone oil, no internal o-rings, no welded diaphragms
- Outputs: 4-20mA, 0-5 Vdc, 0-10 Vdc and mV
- Pressure ranges 0-5 to 500 PSI
- Standard accuracy of 1.0% BFSL (optional accuracies to 0.2%)
- Built-in, proprietary design, lightning and surge protection supplied as standard
- Unparalleled long-term stability



Spectre's 80 Series of submersibles are specifically engineered to eliminate the two most common problems with pressure transducers, noise and drift. The 80 series' large, raw sensor output (10-70x that of a bonded foil strain gauge), long term stability of the Fused Bond Sensor, standard lightning/surge protection provide the most rugged and reliable sensor for submersible applications

### Performance @ 25°C (77°F)

Accuracy:  $<\pm 1.0\%$  BFSL to  $0.2\%$  BFSL  
Stability (2 year):  $<\pm 0.05\%$  FS, typical  
Over pressure protection: 2X Rated Pressure  
Burst Pressure: 2.5X minimum  
Pressure Cycles: >50 Million  
Temperature range: -55 to +125°C (-65 to +250°F)  
Temperature Accuracy:  $\pm 1/2^\circ\text{C}$  ( $\pm 1^\circ\text{F}$ )

### Environmental Data

Operating temp: -40 to +85°C (-40 to +185°F)  
Storage temp: -50 to +125°C (-60 to +250°F)  
Compensated range: 0 to 55°C (-32 to +130°F)  
Temp comp Zero:  $<\pm 1.0\%$  FS  
Temp comp Span:  $<\pm 1.0\%$  FS

### Electrical Data

#### Excitation:

9-36 Vdc (4-20mA and 0-5 V output)  
13-36 Vdc (0-10 V output)  
(option C29: max 29 Vdc excitation)  
5-10 Vdc (mV/V output)

Current consumption: <10mA  
Zero offset:  $<\pm 1.0\%$  of FS  
Span tolerance:  $<\pm 1.0\%$  of FS  
Output load: >10K Ohm

### Physical data

Sensor wetted material: 316SS  
Body material: 316SS  
(Other materials on application)

Pressure connection:  $\frac{1}{4}$ " Male NPT, bullet-nose  
(others on application)

Electrical Connection: Vented and non-vented cable  
(submersible disconnects on application)



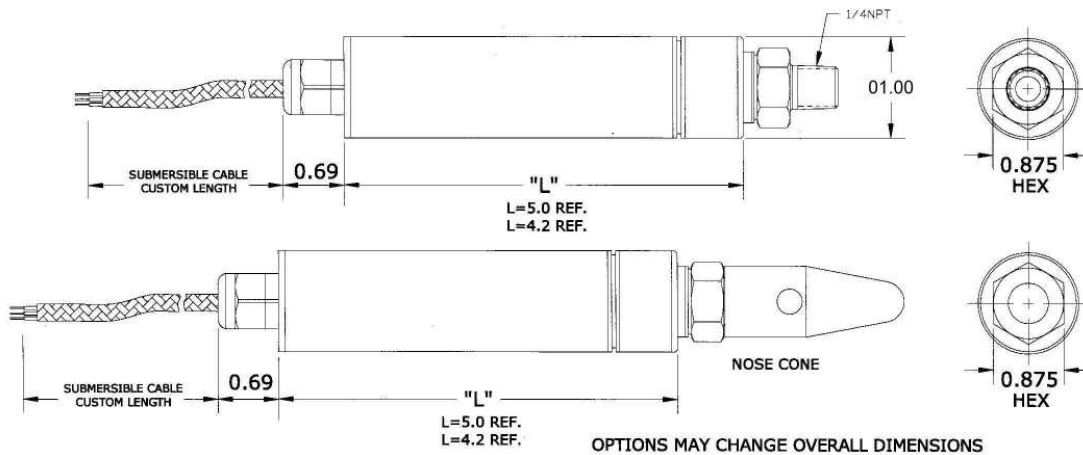
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Ordering guide – Example: 80-A-(0-15 PSIG)-2-D-1-SCV

A	(0-15 PSIG)	2	D	1	SCV
Pressure Port	Range	Units	Output	1	Connector
A=1/4" MNPT B=Nose cone C=Other	Specify pressure range in feet (meters) water, PSI or BAR	1=Absolute 2=Gauge (vented cable) 4=Sealed 6=Other	D=4-20mA E=0-5VDC F=0-10VDC M=mV/V	1=1.0% BFSL 5=0.5% BFSL 2=0.2% BFSL	SCV= Vented cable** SCN=Non-vented Cable** ECX=Other

\*\* Standard cable jacket is Hytrel. Tefzel available on request – contact factory.

### Dimensions:



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

### Typical Applications:

- Ground Water Monitoring
- Wet-well Monitoring
- Ocean research
- Soil remediation
- Level Control
- Surface Water Monitoring