

## ***SeaLevel 8700 Deep Water Submersible***



- Transducer is custom built to your specific temperature, pressure and corrosion conditions.
- Transducer output is digitally mapped to enhance accuracy at any specific temperature or pressure range.
- Outputs - 4-20mA, 0-5V & 0-10V, RS232/RS485.
- Pressure ranges to 0-30,000 Feet of Water
- Accuracies to 0.03% BFSL
- Unparalleled long-term stability.
- Built-in voltage surge protection.
- No silicone oils, no internal o-rings, no welded diaphragms.
- Available with Impulse®, SeaCon® or customer specified electrical connectors.

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Spectre's SeaLevel 8700 Submersible Transducers are specifically engineered for maximum corrosion resistance and the high depth pressures encountered in deep sea applications. The 8700 SeaLevel is manufactured, designed and calibrated to each customer's specific operating conditions. Each transducer output is digitally mapped to correct for any non-linearity or inaccuracies in the sensor. This digital correction and the inherent advantages of the one-piece, fused bond sensor provide the most accurate and flexible transducer in the industry.

### **Typical Specifications** (all transducers custom built to client's requirements)

#### **Performance @ 25°C (77°F)**

Accuracy: <math>\pm 0.05\%</math> BFSL (0.03% optional)  
Stability (2 year): <math>\pm 0.05\%</math> FS, typical  
Over pressure protection: 2.5X Rated Pressure  
Burst Pressure: 5X minimum  
Pressure Cycles: >50 Million  
Temp. range: -55 to +85°C (-65 to +185°F)  
Temperature Accuracy:  $\pm 1^\circ\text{C}$  ( $\pm 1^\circ\text{F}$ )

#### **Environmental Data**

Operating temp: -40 to +85°C (-40 to +185°F)  
Storage temp: -50 to +125°C (-60 to +250°F)

#### **Thermal Limits**

Compensated range: 0 to 55°C (-32 to +130°F)  
Temp comp Zero: <math>\pm 0.2\%</math> FS  
Temp comp Span: <math>\pm 0.2\%</math> FS

#### **Electrical Data**

Excitation:  
9-36 Vdc (4-20mA and 0-5 Vdc outputs)  
14-36 Vdc (0-10 Vdc output)  
Option C29: Maximum 29 Vdc excitation

Current consumption: <math>< 25\text{ mA}</math> (voltage outputs)  
Zero offset: <math>\pm 0.2\%</math> of FS  
Span tolerance: <math>\pm 0.2\%</math> of FS  
Output load: >10K Ohm

#### **Physical data**

Sensor wetted material: 316SS, Inconel, others on application

Pressure connection: 1/4 male NPT (others on Application)

Electrical Connection: Cable, Impulse® or SeaCon® Submersible connectors. Specialty connectors on application.

## SeaLevel 8700 Deep Water Submersible

Typical Model Number: 8700-A-(0-2000FT)-2-D-05-ECS

(contact factory with your requirements for exact model)

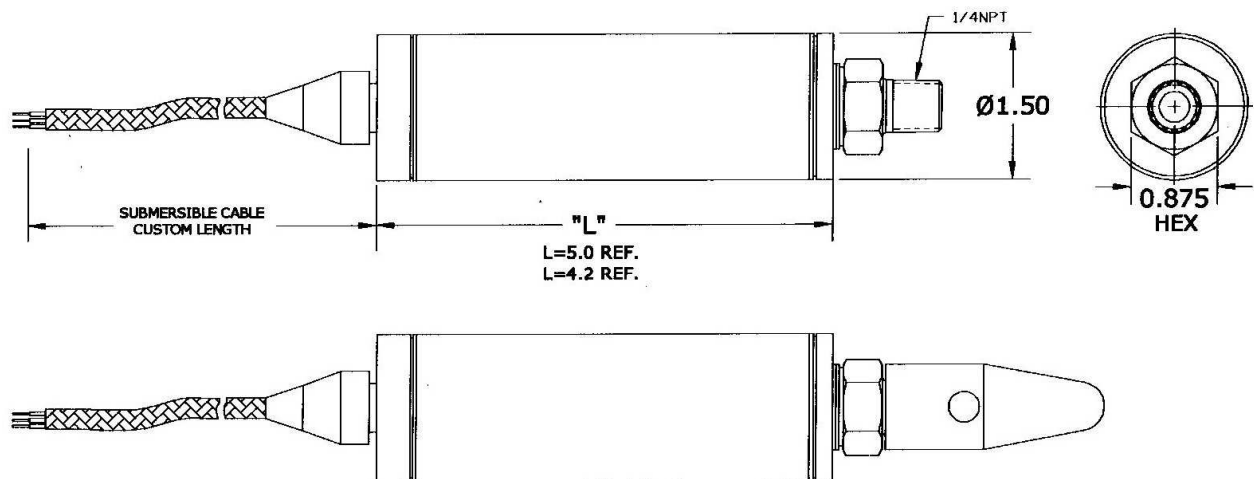
Typical options are shown but not limited to this selection. 8700 Series transducers are custom built to meet the client's requirements. Please contact factory for complete details

A	(0-500)	2	D	5	EC1
Pressure Port	Range	Units	Output	Accuracy	Connector
A=1/4" MNPT B=Nose Cone C=Other	Specify Pressure Range in PSI, BAR, kPa or feet/inches WC	2=Gauge 4=Sealed X=Other	D=4-20mA E=0-5VDC F=0-10VDC G=RS232 H=RS485 X=Other (4-wire, isolated versions available – Contact Factory)	1=0.1% BFSL* 05=0.05% 03=0.03%	SCV=Vented cable (gauge units) SCN=Non-vented cable ECI=Impulse® connector ECS=SeaCon® connector ECX=Other

\*BFSL = Best Full Scale Line

Note: Process operating temperature must be specified at the time of order placement to insure maximum performance.

Typical Dimensions:



OPTIONS MAY CHANGE OVERALL DIMENSIONS