

## **Model 8950/8951 “Undrownable” Submersible Transducer**

With digitally compensated electronics for precision accuracy



- **Models 8950 and 8951 can withstand moisture, condensation or liquid ingress through the vent tube with no damage to the electronics.\*\***
- **Customized to your specific temperature and pressure conditions**
- **Outputs: 4-20mA, 0-5 Vdc, 0-10 Vdc. Optional digital communications available.** (Consult factory)
- **Pressure ranges 0-2 PSI to 100 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**

### **Performance @ 25°C (77°F)**

Accuracy:  $\leq \pm 0.05\%$  Best Fit Straight Line (BFSL)  
Stability (2 year):  $\leq \pm 0.05\%$  FS, typical  
Over pressure 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:  $\pm 1^\circ\text{C}$  ( $\pm 1^\circ\text{F}$ )  
Total Error Band:  $\pm 1.5\%$  (includes zero, span, static accuracy and temperature)

### **Environmental Data**

Storage temp: -50 to +125°C (-60 to +250°F)  
Compensated range: 1 to 30°C (+33 to +86°F)

### **Electrical Data**

#### **Excitation:**

6-36 Vdc - 4-20mA output  
9-36 Vdc – 0-5 Vdc output  
14-36 Vdc – 0-10 Vdc output  
Option C29: Max 29 Vdc excitation

Current consumption: 0.12 Watt  
Zero offset:  $\leq \pm 0.2\%$  of FS  
Span tolerance:  $\leq \pm 0.2\%$  of FS  
Output load: >10K Ohm

#### **Physical data**

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

Pressure connection: ¼" Male NPT (8950)  
Stainless debris stand-off (8951)  
Electrical Connection: ½ MNPT with Hytrel vented cable

\*\*Though internally accumulated liquid will not harm the transducer, a slight inaccuracy in readings may be experienced by its presence. Invasive liquid must be compatible with 316 stainless steel. Use of a desiccant filter or aneroid bellows is still strongly recommended.

## Model 8950/8951 “Undrownable” Submersible Transducer

### Model 8950 Ordering guide – Example: 8950-A-(0-15 PSI)-2-D-05-SCV

A	(0-15PSI)	2	D	05	SCV
Pressure Port	Range	Units	Output	Accuracy	Connector
A=1/4" MNPT B=Nose cone C=Other	Specify pressure range in: inches (mm) water, feet (meters) water, PSI or BAR	1=Absolute 2=Gauge (vented cable) X=Other	D=4-20mA E=0-5VDC F=0-10VDC X=Other	05=0.05% BFSL* 03=0.03% BFSL*	SCV= 1/2" MNPT with Vented Cable*** ECX=Other

### Model 8951 Ordering guide – Example: 8951-A-(0-15 PSI)-2-D-05-SCV

A	(0-15 PSI)	2	D	05	SCV
Pressure Port	Range	Units	Output	Accuracy	Connector
A=Debris stand-off	Specify pressure range in: inches (mm) water, feet (meters) water, PSI or BAR	1=Absolute 2=Gauge (vented cable) X=Other	D=4-20mA E=0-5VDC F=0-10VDC X=Other	05=0.05% BFSL* 03=0.03% BFSL*	SCV= 1/2" MNPT with Vented Cable*** ECX=Other

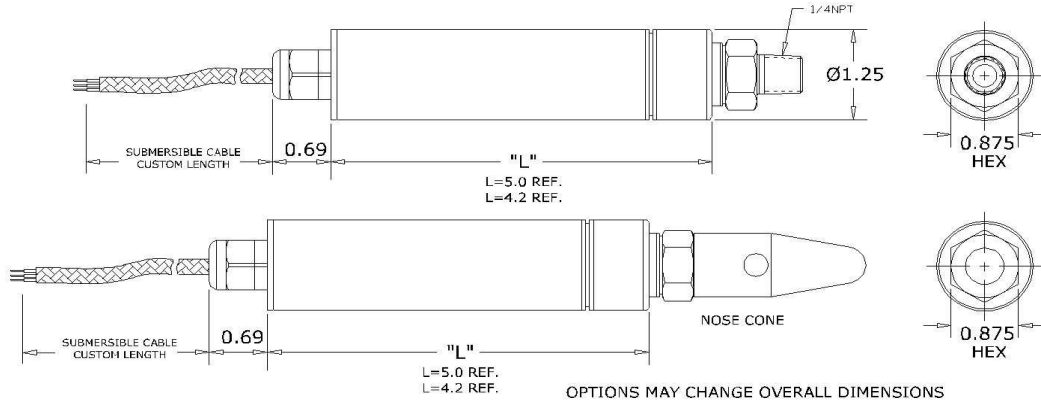
\* BFSL = Best Fit Straight Line

\*\*\* Standard cable jacket is Hytrel. Others may be available on request – contact factory.

### Dimensions:

(For reference only. Actual dimensions may vary. Standard configuration includes 1/2" MNPT conduit connection)

#### Model 8950



#### Model 8951

