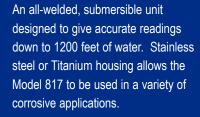
# **Liquid Level Transducer**

# **MODEL 817**



#### **FEATURES**

- ▶ Submersible
- ▶ Less then 7/8" diameter
- ▶ 316L SS wetted parts or Titanium
- ➤ Ranges from 80" to 1200 feet of water/500 PSI
- ▶ Intrinsically Safe design available

## **TYPICAL APPLICATIONS**

- ▶ Methane gas wells
- ▶ Down hole water wells
- ▶ Inground and underground tanks
- ▶ Water and sewage treatment plants
- ▶ Reservoirs/Dams
- ▶ Marine/Shipboard
- ► Chemical waste ponds

Approval Options Available



# SUBMERSIBLE. DEPENDABLE. ACCURATE

#### ALL-WELDED SENSOR DESIGN

The Model 817 has several features that maximize its performance and ensures that it operates without leaking. The all-welded sensor design eliminates the need for an O-Ring seal, thereby eliminating potential leak paths.

The silicon piezoresistive sensor in the Model 817 provides high accuracy and stability in many different corrosive media types.

### UNIQUE CABLE SEAL

Our unique cable seal ensures the watertight integrity of the unit, up to 500 PSI. The Model 817 provides a millivolt signal that is ratiometric to the input voltage. Additional features include a removable end cap and an optional end cap for use when weights are required. An end cap with a ½" NPT pressure port is also available for checking calibration of the unit against a known pressure source.



Viatran offers a complete line of liquid level transmitters. For product availability, or to order please call 1-800-688-0030.

# **SPECIFICATIONS**

### **PERFORMANCE**

Performance 0-3, 5, 10, 15, 30, 50, 100, 300, 500 PSI Full Scale Pressure Range (FSPR) . . . . (0-80, 140, 275, 415, 555, 690, 830 "WC)

Accuracy (combined linearity,

hysteresis and repeatability) . . . . . . . ≤±0.1% FSO typical (±0.25% FSO max.)

Full Scale Output

 817 (3 to 5 PSI)
  $50 \text{ mV} \pm 2 \text{ mV}$  @ 10V supply

 817 (10 PSI and above)
  $100 \text{ mV} \pm 2 \text{ mV}$  @ 10V supply

 Long Term Stability
  $\leq \pm 0.25\%$  FSO per year

Zero Balance . . . . . . 0 mV ± 2 mV
Response Time . . . . . ≤1 mSec

Temperature Effect on Zero  $\leq \pm 1.0\%$  FSO per 100° F Temperature Effect on Span  $\leq \pm 1.0\%$  FSO per 100° F Compensated Temperature Range  $32^\circ$  F to +180° F Operating Temperature . -40° F to +185° F Storage Temperature Range . -40° F to +250° F

**ELECTRICAL** 

Supply Voltage ..... 5 to 15V

Output Signal . . . . . . . . . . . . . . . . . 50 to 100 mV (range & voltage dependent)

Load Resistance . . . . . . . . . . . . . . . . . 500K Ohms minimum

Circuit Protection . . . . . . . Output may be short circuited indefinitely.

Input polarity may be reversed. Intrinsically

Safe Design.

5 Wire, 22 AWG

**Electrical Connections** 

 Red
 + Power

 Black
 + Signal

 Green
 - Power

 White
 - Signal

 Bare
 Case Ground

**MECHANICAL** 

Diameter 0.875 inches

Weight - Pressure Capsule 10 oz.

Weight - Cable 7 lbs. per 100 feet (Polyurethane)

Materials of Construction

Housing 316 Stainless Steel
Pressure Connection 316 Stainless Steel
Sensor 316 Stainless Steel
Cable Options Polyurethane, Tefzel
Mounting Suspended by the cable
Identification Laser etched onto body

CERTIFICATIONS TG Option Code

 FM
 Intrinsic Safety Class I, Groups A thru D,

 Class I, Zone 0, AEx ia IIC T4 at Ta = 80°C

 CSA
 Intrinsic Safety Class I, Div. 1, Groups A,

B, C, D, T3 at Ta = 94°C, T3 at Ta = 54°C

**OPTIONS** 

Codes Descriptions
EA Special calibration

NH . . . . . Customer specified identification

NR ..... Alternate protective baffle with weight hook

(maximum weight: 2 lbs.) 1/8 DIN digital indicator

TG ... FM & CSA Intrinsically Safe label
ZB ... 1/2" NPT conduit connection (molded)

Note: Application of some available options may affect standard performance. Consult your Viatran representative for details.

Accessories Breather Tube Filters

Panel Mount Digital Display

Pressure Test Fitting

[1/4" NPT (F), screws into end cap threads]

## NOTE:

1. ALL DIMENTIONS ARE NOMINAL, IN INCHES AND FOR REFERENCE PURPOSES ONLY

