# LevelTransmitter



## MEASURE LEVEL USING HEAD PRESSURE

# HYDROSTATIC HEAD PRESSURE TO ACCURATELY MEASURE LEVEL

If you choose to measure level through hydrostatic head pressure, then you can't do better than the Model 517 from Viatran. The Model 517 promises an accuracy to 0.1%.

And it's submersible. Meaning you can throw it in the tank and not worry about some of the things that Process Engineers have to worry about, like the fog rolling in. The Model 517 will send you a reliable 4 to 20 mA output.

#### WHAT DOES RUGGED REALLY MEAN?

The model 517 has been engineered to survive in hostile media. We're confident you can depend on the 517. Internal circuitry provides lightning protection, while a 4-20 mA output signal minimizes potential outside interference and signal degra-

dation. All of this is critical if the signal needs to travel over long cable lengths (as in groundwater studies).

#### **RUGGED FEATURES**

The unique Viatran cable seal ensures watertight integrity up to 500 PSI. Other potential leak paths are avoided by Viatran's all-welded sensor design. This design eliminates the O-Ring seal.

### OPTIONAL 1/4" NPT PRESSURE PORT

A removable end cap comes standard on the Model 517. However, if weight is needed, heavier end caps are available. The optional 1/4" NPT pressure port is is critical for checking unit calibration against a known pressure source.

For product availability, or to order, call 1-800-688-0030, ext 506.

MODEL 517

The Model 517 is an all-welded, submersible unit designed to give an accurate level measurement in up to 1,200 feet of water. The 517 is excellent for general water applications, and excels in a number of corrosive applications. The piezoresistive silicon sensor offers excellent accuracy and stability.

#### **FEATURES**

- Submersible
- Less than 7/8" diameter
- Corrosion resistant construction
- Ranges from 30"WC to 1,200 feet of water/500 psi
- Intrinsically Safe design available
- All stainless steel construction

### **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. Contact Viatran for the latest.



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## **SPECIFICATIONS**

#### PERFORMANCE

Full Scale Pressure Range (FSPR) ... 0-3, 5, 10, 15, 30, 50, 100, 300, 500 PSI, 0-80, 140,

275, 415, 555, 690, 830" water column

Accuracy (combined linearity,

hysteresis and repeatability) . . . . . . ≤±.1% FSO (<±0.25% FSO maximum)

Hysteresis & Repeatability . . . . . ≤±0.05% FSO Full Scale Output (FSO) . . . . . . 16 mA

Resolution ...... Infinite

Zero Balance . . . . . . . . . . . . 4 mA ±.25% FSO

Long Term Stability . . . . . . . . . ≤±0.20% FSO per year

 Response Time
 ≤ 1 mSec

 Temperature Effect on Zero
 ≤ 1.0% per 100°

 Temperature Effect on Span
 ≤ 1.0% per 100°

 Compensated Temperature Limits
 32° to +185°

 Operating Temperature Limits
 -40° to +185°

 Storage Temperature Limits
 -65° to +250°

**ELECTRICAL** 

Supply/Voltage . . . . . . . . . . . . . . . . 9.0 - 30 VDC

Power Supply Regulation Effect . . . . . ≤±0.0001% FSO per Volt

Maximum Load Resistance ...... Output may be short circuited indefinitely.

Input polarity may be reversed. Over-voltage

protected to 1000 volts. < 1 mSec duration.

Electrical Connection . . . . . . . . . . 3 Wire, 22 AWG

Red + Signal Black - Signal

#### **MECHANICAL**

Pressure Connection . . . . . . . . . . . . . . . . 5/8"-18 UN female thread with protective

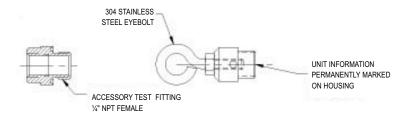
end cap installed

 Proof Pressure
 3 times rated range

 Burst Pressure
 5 times rated range

 Diameter
 0.875 inches

Weight ..... Pressure Capsule 10 oz.



## MATERIALS OF CONSTRUCTION

FM Intrinsic Safety Class I, II, III, Div. 1,
Groups A thru G and AEx ia IIC T4, Indoor
and Outdoor NEMA 4X Hazardous Locations.
CSA Intrinsic Safety Class I, Div.1, Ex ia IIC

T4 Type 4 Enclosure

**Options** 

DH Codes Descriptions
DN Special range
EA Improved accuracy
NH Special calibration

NR ...... Customer specified identification

Alternate protective baffle with weight

TG ..... hook (maximum weight: 2 lbs)

CSA and FM Intrinsically Safe design

(consult factory)

Accessories

Breather Tube Filters
Panel Mount Digital Display
Pressure Test Fitting

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

Note: Application of some available options may affect standard performance. Consult your Viatran representative for details on this or other products.



Contact your Water Market Service Team at 1-800-688-0030, ext 506 for other Viatran Solutions or visit www.viatran.com.

