

## LEVEL TRANSMITTER Model 517



### FEATURES

- Submersible
- Less than 7/8" diameter
- Corrosion resistant construction
- Ranges from 30" WC to 1,200 ft WC/500 PSI (34 bar)
- 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

### 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 to 20 mA output signal minimizes potential outside interference and signal degradation. 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 (34 bar). 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 ideal for checking unit calibration against a known pressure source.

*For more information, contact Viatran.*



**LEVEL TRANSMITTER**  
**Model 517**

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**PERFORMANCE**

**Accuracy Combined**

Full Scale Pressure Range (FSPR) .....	0-3, 5, 10, 15, 30, 50, 100, 200, 300, 500 PSI
.....	0-7, 12, 23, 35, 69, 115, 230, 462, 693, 1154 feet of water column
Linearity, Hysteresis & Repeatability .....	$\leq \pm 0.1\%$ FSO typical ( $\pm 0.25\%$ FSO max)
Hysteresis & Repeatability .....	$\leq \pm 0.05\%$ FSO
Full Scale Output (FSO) .....	16 mA
Resolution .....	Infinite
Zero Balance .....	4 mA $\pm 0.25\%$ FSO
Long Term Stability .....	$\leq \pm 0.20\%$ FSO per year
Response time.....	$\leq 1$ mSec
Temperature Effect on Zero .....	$\leq \pm 1.0\%$ 100°F (37°C)
Temperature Effect on Span .....	$\leq \pm 1.0\%$ 100°F (37°C)
Compensated Temperature Range .....	32°F to 180°F (0°C to 82°C)
Operating Temperature.....	-40°F to 185°F (-40°C to 85°C)
Storage Temperature Range .....	-40°F to 250°F (-40°C to 121°C)

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**ELECTRICAL**

Supply Voltage.....	9 to 30 Vdc
Power Supply Regulation.....	$\leq \pm 0.0001\%$ per Volt
Output Signal .....	4 to 20 mA
Span .....	$< 0.25\%$ FSO
Circuit Protection .....	Reverse polarity protected. Over-voltage protected to 1000V, ..... $< 1$ mSec duration
Electrical Connection.....	3 wire, 22 AWG
Red.....	+Power/Signal
Black .....	-Power/Signal
Bare.....	Case ground

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**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.
Cable Weight.....	30 lbs per 1000 feet

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**MATERIALS OF CONSTRUCTION**

Housing .....	316L stainless steel
Pressure Connection Sensor.....	316L stainless steel
Cable Options.....	Polyurethane, Tefzel
Identification.....	Laser etched onto body
Cable Strength.....	Internal Kevlar Cord- 300 Lbs Pull

# LEVEL TRANSMITTER Model 517

## CERTIFICATIONS (Consult Factory for Available Options)

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

Codes DH.....Special range  
 DN.....Improved accuracy  
 EA.....Special calibration run  
 NH.....Customer specified identification  
 NR.....Alternate protection baffle plate with weight hook (max weight 2 lbs)  
 TG.....CSA and FM Intrinsically Safe design

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

## ACCESSORIES

Breather tube filler  
 Panel mount digital display  
 Pressure test fitting (1/4" NPT (F) screws into end cap threads)  
 Desiccant tube kit

