

Model 59S

Slimline Submersible Level Transmitter



A submersible level transmitter in a small package!

- ◆ The Viatran Model 59S is a submersible transmitter specifically designed to meet the challenge of liquid measurement in areas with confined access.
- ◆ Only 0.75 inch diameter x 4.4 inches tall
- ◆ Available in ranges from 0-40 Inches W.C. to 0-835 Feet W.C.
- ◆ Polyurethane (PUR) cable is the most popular, Polyvinyl Chloride (PVC) & Fluorinated Ethylene-Propylene (FEP) cables are also offered
- ◆ Liquid Level & Depth, Well Monitoring, Lift Stations, Shipboard, In-ground / Above Ground Tanks, and Inventory Tank Gauging.



Performance	Pressure Ranges From	0-40 Inches W.C. to 0-835 Feet W.C.
	Accuracy	≤ +/- 0.35% FSO for ranges ≥ 15 Ft. W.C.
	[Combined Non-Linearity (BFSL), Hysteresis & Repeatability]	≤ +/- 0.50% FSO for ranges < 15 Ft. W.C. ≤ +/- 0.25% FSO for ranges ≥ 15 Ft. W.C. (Optional)
	Compensated Temperature Range	32° to 122° F (0 to 50° C) ≥ 13.4 Ft. W.C., otherwise 32° to 158° F (0 to 70° C)
	Operating Temperature Range	14° to 158° F (-10 to 70° C) Note: Medium must not freeze near sensor
	Storage Temperature Range	-13° to 158° F (-25 to 70° C)
	Long Term Stability (%FSO)	≤ +/- 0.1% FSO / year at reference conditions
	Thermal Effect on Zero	≤ +/- 2% FSO per 100° F for ≥ 13.4 Ft. W.C., otherwise ≤ +/- 0.8% FSO per 100° F
	Thermal Effect on Span	≤ +/- 2% FSO per 100° F for ≥ 13.4 Ft. W.C., otherwise ≤ +/- 0.8% FSO per 100° F
Electrical	Output Signal	4-20 mA
	Supply Voltage	12-36 Vdc
	Power Supply Regulation	< +/- .005% FSO per volt
	Circuit Protection	Reverse polarity protected, CE marked
	RFI/EMI	CE EMC compliant as per IEC EN 61326
	Voltage Spike Protection	Withstand 1000 volt spike per EN 61000
	Response Time	<10mSec
Mechanical	Pressure Connection	Protective POM cap
	Ingress Protection	IP 68
	Overpressure Limit	2.4x Minimum
	Burst Pressure	5x Minimum
	Weight	0.22 lbs. (without cable)
Materials of Construction	Housing	316L stainless steel
	Sensor Diaphragm	316L stainless steel
	O-ring Seals	FKM or EPDM (customer specified)
	Protective Cap	POM (Polyoxymethylene)



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How to Order

MODEL 59S	UNITS OF PRESSURE (1 digit)	PRESSURE RANGE (4 digits)	SEALS (2 digits)	CABLE FORMAT (2 digits)	ACCURACY (1 digit)	CABLE LENGTH (3 digits)	OPTIONS (2 digits)
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Units of Pressure

F	Feet of Water Column
I	Inches of Water Column

Pressure Range

Any Range from 0-40 Inches W.C. up to 0-835 Feet W.C. can be specified at no additional cost.
(Ranges must be in Inches WC or Feet WC)

*Consult factory for range code

**Please advise if specific gravity is other than 1

Example of Four Digit Codes:

Range	Four Digit Codes for Range
5	= 5 0 0 0 Insert Range Code 5000
10	= 1 0 0 1 Insert Range Code 1001
15	= 1 5 0 1 Insert Range Code 1501
50	= 5 0 0 1 Insert Range Code 5001
100	= 1 0 0 2 Insert Range Code 1002
250	= 2 5 0 2 Insert Range Code 2502
835	= 8 3 5 2 Insert Range Code 8352

Seals

GK	Fluoroelastomer (FKM)
GD	Ethylene Propylene (EPDM)

Cable Format

PC	Polyvinyl Chloride (PVC)
TL	Polyurethane Cable (PUR) *Stocked in select lengths for fast delivery
PA	Fluorinated Ethylene-Propylene (FEP)

Accuracy

5	Ranges < 15 Ft. = +/- 0.50% FSO (BFSL)
3	Ranges ≥ 15 Ft. = +/- 0.35% FSO (BFSL)
2	Ranges ≥ 15 Ft. = +/- 0.25% FSO (BFSL) Optional

Cable Length

XXX	Listed in Whole Meters Only (must be 3 digits - ex. 012 = 12 Meters)
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Options

EA	Special Calibration Run
PW	Calibrate item with meter/display

Information is accurate to the best of Viatran's knowledge. We reserve the right to change specifications at any time.

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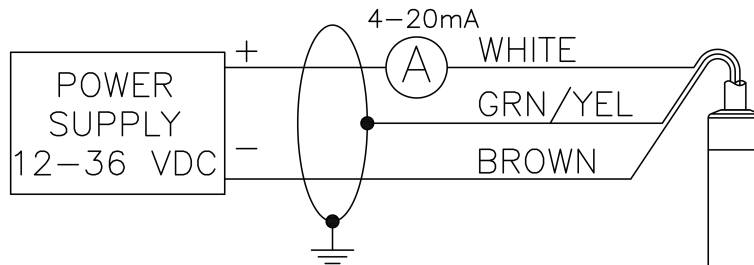


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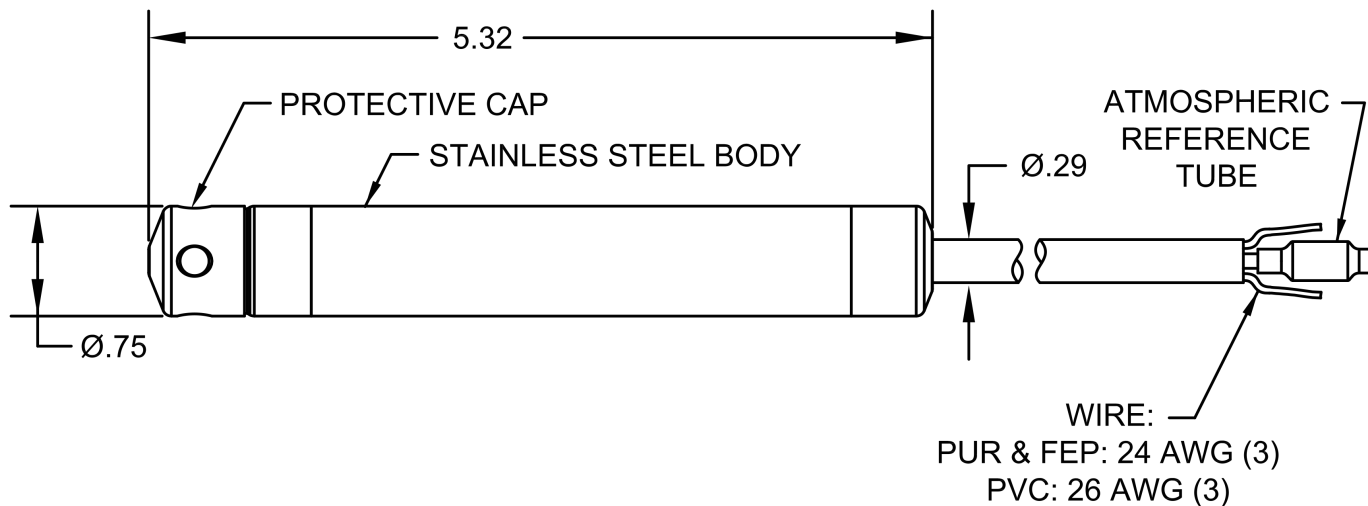
Connection Diagrams & Wiring

The standard wiring of your Viatran 59S level transmitter is outlined below. The wiring information is also marked on your unit.

The 59S level transmitter can be powered by a DC power supply ranging from 12 to 36 volts. See installation manual for more details.



WIRING	
WHITE	+SUPPLY
BROWN	-SUPPLY
GRN/YEL	SHIELD



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