

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. or equivalent in Meters or PSI
- ◆ 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. or equivalent in Meters or PSI.
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)

Viatran

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How to Order

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

F	Feet of Water Column
I	Inches of Water Column
M	Meters of Water Column
P	PSI (Whole numbers only)

Pressure Range

Any Range from 0-40 Inches W.C. up to 0-835 Feet W.C. or equivalent can be specified at no additional cost.

*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)

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 Format

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

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. Please contact Viatran for specific order inquiries.



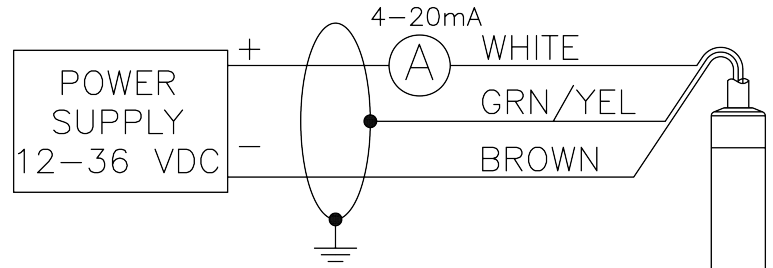
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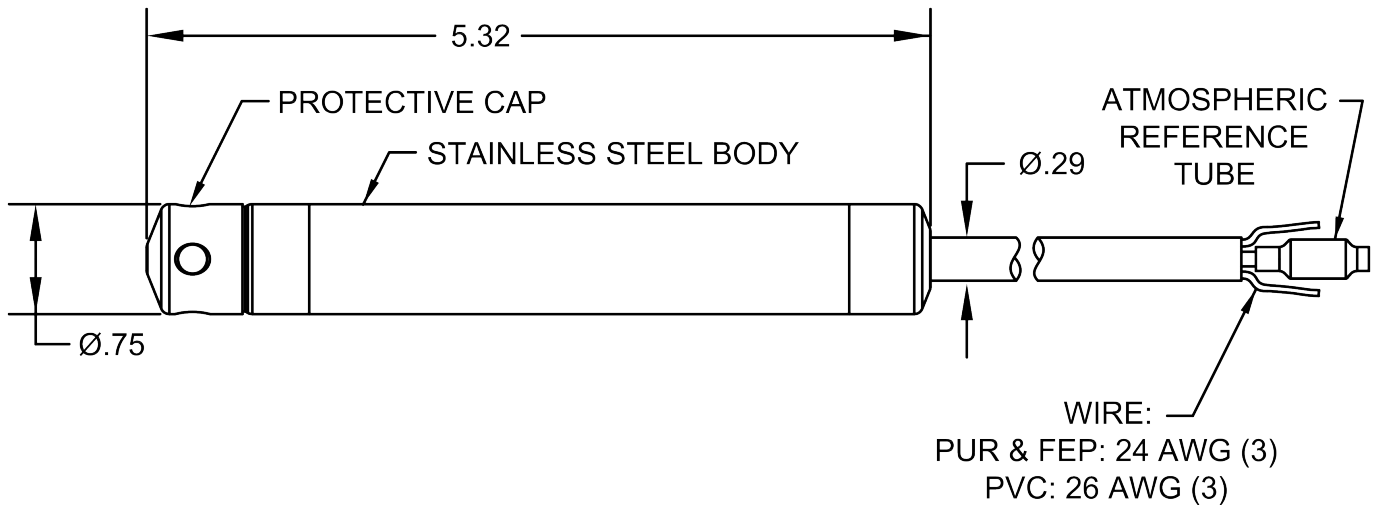
Connection Diagrams & Wiring

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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