

Model 59T

Submersible Level & Temperature Transmitter



A submersible level transmitter that provides media temperature too!

- The Model 59T allows for both level and media temperature measurements at the same time.
- The Viatran Model 59T is a submersible transmitter specifically designed to meet the challenging demands of liquid measurement. Additionally the temperature feature provides a second 4-20 mA analog output representing one of three discrete temperature range choices.
- 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 standard while Polyvinyl Chloride (PVC) & Fluorinated Ethylene-Propylene (FEP) cables are also offered.
- Liquid Level & Depth, Water & Grey Water, Lift Stations, Reservoirs & Dams, Rivers, Holding Ponds, Wells, In-ground/Above Ground Tanks, and Irrigation Systems.



Performance	Pressure Ranges From	0-40 Inches Water Column up to 0-835 Feet Water Column or equivalent in Meters or PSI.
	Pressure Accuracy	$\leq \pm 0.35\%$ FSO for ranges ≥ 15 Ft. W.C. [Combined Non-Linearity (BFSL), Hysteresis & Repeatability] $\leq \pm 0.50\%$ FSO for ranges < 15 Ft. W.C. $\leq \pm 0.25\%$ FSO Optional for ranges ≥ 15 Ft. W.C.
Electrical	Compensated Temperature Range	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)	$\leq \pm 0.1\%$ FSO / year at reference conditions
	Thermal Effect on Zero	$\leq \pm 0.8\%$ FSO per 100° F
	Thermal Effect on Span	$\leq \pm 0.8\%$ FSO per 100° F
	Temperature Accuracy	$\leq \pm 1.8^\circ$ F (1°C)
Mechanical	Output Signal	4-20 mA (for both the Pressure & Temperature)
	Supply Voltage	10-30 Vdc (for both the Pressure & Temperature)
	Power Supply Regulation	$< \pm 0.005\%$ 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
Materials of Construction	Response Time	< 10 mSec
	Pressure Connection	Protective POM cap
	Ingress Protection	IP 68
	Overpressure Limit	4x Minimum (> 335 Ft. range = 3.2x)
	Burst Pressure	6x Minimum (≥ 200 Ft. range = 4.8x)
	Weight	0.5 lbs. (without cable)
	Housing	316L stainless steel
	Sensor Diaphragm	316L stainless steel
	O-ring Seals	FKM
	Protective Cap	POM (Polyoxymethylene)

Viatran

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How to Order

MODEL
59T

UNITS OF
PRESSURE
(1 digit)

PRESSURE
RANGE
(4 digits)

TEMPERATURE
RANGE
(1 digit)

ACCURACY
(1 digit)

CABLE
FORMAT
(2 digits)

CABLE LENGTH
(3 digits)

OPTIONS
(2 digits)

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 Water Column up to 0-835 Feet Water Column, 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	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

Temperature Range

L	= 32° to 86° F
M	= 32° to 122° F
H	= 32° to 158° F

Accuracy

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

Cable Format

PC	Polyvinyl Chloride (PVC)
TL	Polyurethane Cable (PUR)
PA	Fluorinated Ethylene-Propylene (FEP)

Cable Length

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

Options

EA	Special Calibration Run
PW	Calibrate item with meter/display

Need Accessories?

Consult our Application Engineers for: Cable Hangers, Junction Boxes, Digital Displays and Pump Controllers

98DS59Td



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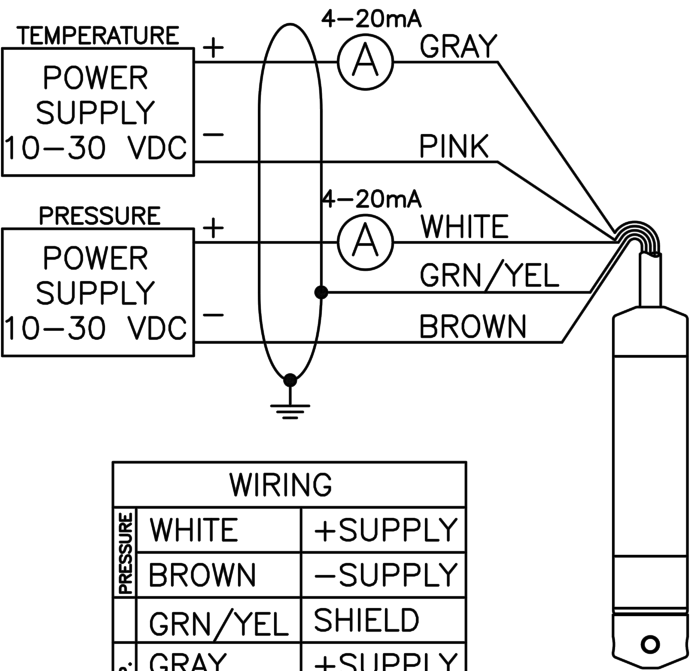
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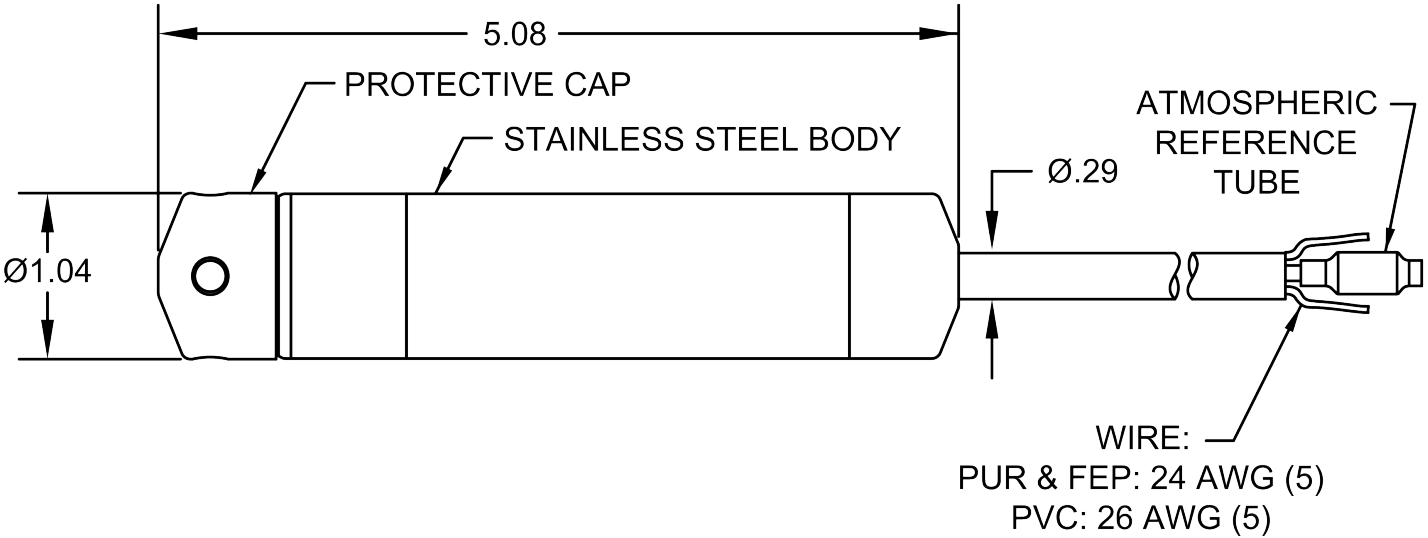
Connection Diagrams & Wiring

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

The 59T level & temperature transmitter can be powered by DC power supplies ranging from 10 to 30 volts. See installation manual for more details.



WIRING		
PRESSURE	WHITE	+SUPPLY
	BROWN	-SUPPLY
	GRN/YEL	SHIELD
TEMP.	GRAY	+SUPPLY
	PINK	-SUPPLY



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.

