

Model 59C

Chemical Resistant Submersible Level Transmitter



A submersible level transmitter for highly aggressive chemical media!

- ◆ The 59C provides Depth and Level measurements while submerged in viscous or aggressive media. Well suited for chemical tank volume or level monitoring. The semi-flush ceramic sensing face resists clogging and is easily cleaned.
- ◆ The Viatran Model 59C is a submersible transmitter specifically designed to withstand aggressive media. Its high purity ceramic sensor and PP or PVDF housing counter liquids that may otherwise be destructive.
- ◆ Available in ranges from 0-16 inches W.C. to 0-335 Feet W.C.
- ◆ Polyurethane (PUR), Thermoplastic elastomer (TPE) & Fluorinated Ethylene-Propylene (FEP) cables are offered.
- ◆ Liquid Level & Depth, Water & Wastewater, Lift Stations, Leachate Collection, Holding Ponds, Wells, In-ground/Above Ground Chemical Tanks, and Inventory Tank Gauging.



Performance

Pressure Ranges From	0-16 inches W.C. to 0-335 Feet W.C.
Accuracy	≤ +/-0.35% FSO [Combined Non-Linearity (BFSL), Hysteresis & Repeatability]
Compensated Temperature Range	32° to 158° F (0 to 70° C)
Operating Temperature Range	-13° to 212° F (-25 to 100° C) Note: Medium must not freeze near sensor
Storage Temperature Range	-13° to 212° F (-25 to 100° C)
Long Term Stability (%FSO)	≤ +/- 0.1% FSO / year at reference conditions
Thermal Effect on Zero	≤ +/- 0.08% FSO per 100° F
Thermal Effect on Span	≤ +/- 0.08% FSO per 100° F

Electrical

Output Signal	4-20 mA
Supply Voltage	10-32 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	< 380 mSec

Mechanical

Pressure Connection	Open Face/Semi-flush
Ingress Protection	IP 68
Overpressure Limit	6x Minimum (> 200 Ft. range = 3.5x)
Weight	0.7 lbs. (without cable)

Materials of Construction

Housing	PP (Polypropylene) or PVDF (Polyvinylidene Fluoride)
Sensor Diaphragm	Ceramic Al ₂ O ₃ 99.9%
Cable	PUR, FEP or TPE
Seals	FKM or EPDM



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How to Order	MODEL	UNITS OF PRESSURE	PRESSURE RANGE	BODY MATERIAL	SEALS	CABLE FORMAT	CABLE LENGTH	OPTIONS
	59C	(1 digit)	(4 digits)	(2 digits)	(2 digits)	(2 digits)	(3 digits)	(2 digits)

Units of Pressure

F	Feet of Water Column
I	Inches of Water Column
M	Meters of Water Column
P	PSI

Pressure Range

Any Range from 0-16 inches W.C. up to 0-335 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

Body

PP	Polypropylene (PP)
PV	Polyvinylidene Fluoride (PVDF)

Seals

GK	Fluoroelastomer (FKM)
GD	Ethylene Propylene (EPDM)

Cable Format

TL	Polyurethane Cable (PUR) *Stocked in select lengths for fast delivery
PA	Fluorinated Ethylene-Propylene (FEP)
PB	Thermoplastic Elastomer (TPE)

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.

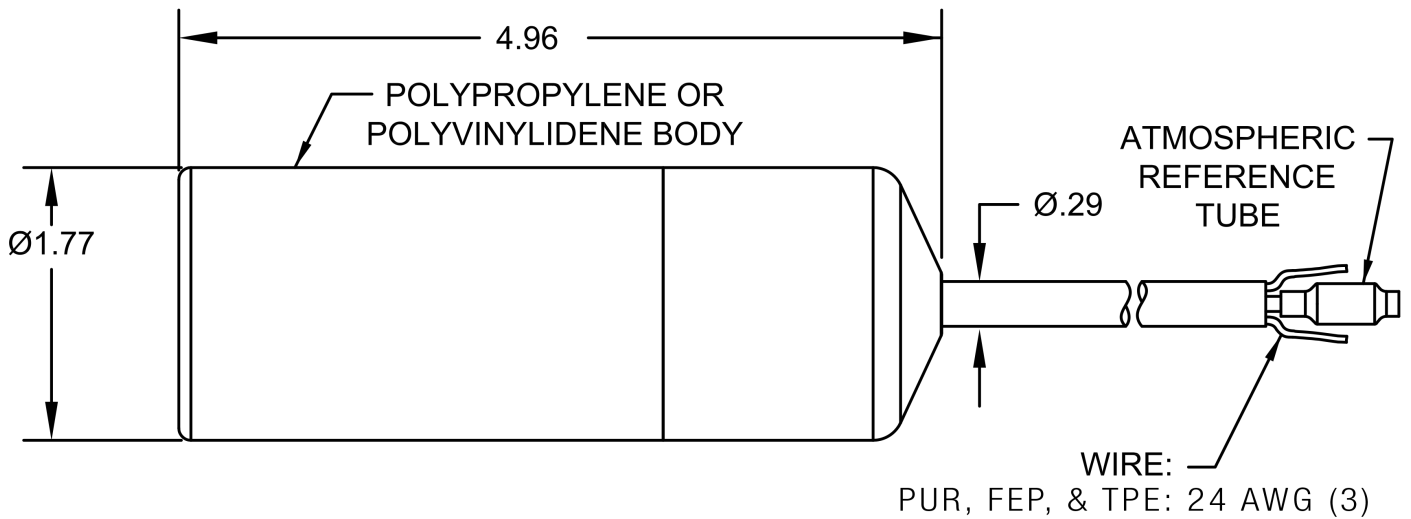
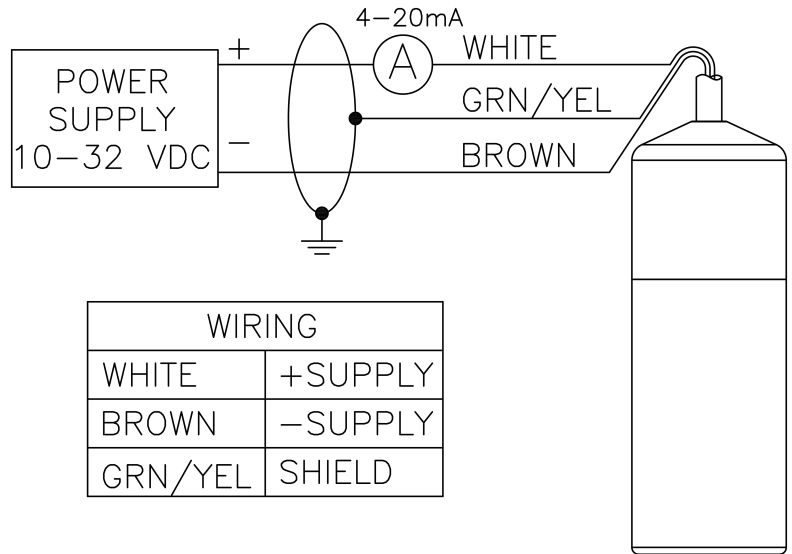
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Connection Diagrams & Wiring

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

The 59C level transmitter can be powered by a DC power supply ranging from 10 to 32 volts. See installation manual for more details.



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