100 SERIES

Continuous Submersible Level Transmitter

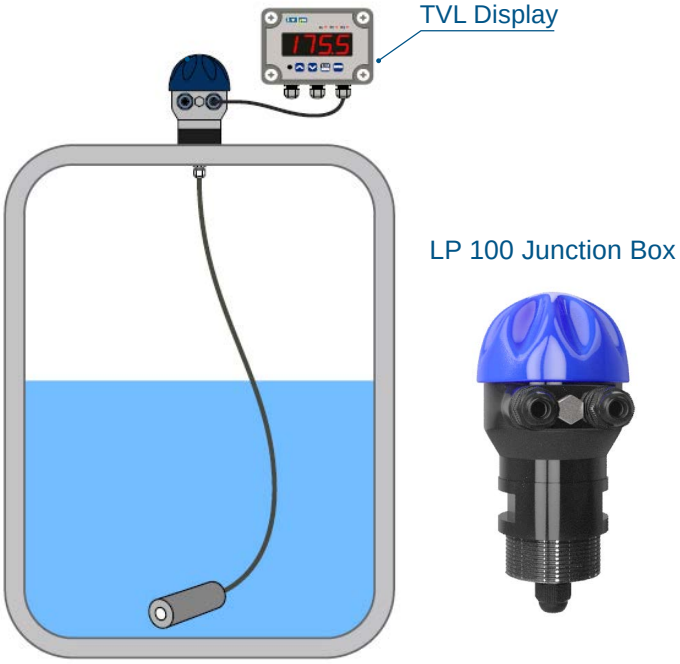
- Works on Foam | Vapor | Turbulence
- Excellent Chemical Resistance
- All Plastic Design
- PTFE Teflon® Shielded Cable
- Integral Weight | No Floating
- FFKM Kalrez® Seals

PVC | PP | PVDF | FFKM

RoHS Compliant CE

SERIES : 100
BODY : PVC | PP | PVDF
SEALS : FFKM Kalrez®

The 100 Series Transmitter is designed for Continuous Level Measurement of Aggressive Liquid Media



Pressure Measurement

- Tanks | Sumps > 100 ft Range

Output Signal

- 2 wire | 4-20mA | Hart | RS485

Features

- Corrosive Chemicals | Acids | Bases
- Integral Weight | Eliminates Floating
- Ceramic Sensing Diaphragm
- High Accuracy
- Non Clogging Design
- PTFE Teflon® Jacketed Cable Excellent for Foam | Vapor | Condensate
- Heavy Duty Rugged Design
- No Moving Parts
- Automatic Temperature Compensation

Applications

Sewage

- Foam | Vapor | Turbulence | Condensate
- Waste Water Treatment
- Leachate Collection
- Waste Sumps or Pits
- Chemical Dosing
- Inventory Management

Aggressive media

- Acids + Bases
- Bulk Chemicals
- Chemical Day Tanks
- Plating Tanks
- PH Control Tanks
- Storage Tank Monitoring

- **The Solution to Tough Applications where Ultrasonic Sensors Simply DO NOT WORK!**
- **No Lost Signals**

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Input Pressure Range

Level ft/H_2O		14	20	34	54	* Consult Factory for Levels > 54 Ft
Overpressure	psi	210	290	290	380	
Burst Pressure >	psi	290	580	580	720	

Output Signal | Supply

Standard	4-20mA 2-wire | Hart | RS 485 | Voltage

Performance

Accuracy	<± 0.5% Full Scale or Better
Permissible load	R_{max} = [(Vs-V_{smin})/0.02 A]
Influence effects	Supply : 0.05% Full Scale Load : 0.05% Full Scale
Long term stability	<± 0.1% Full Scale Over One Year
Response time	<10 msec
[1]Accuracy According to IEC 60770 - Limit Point Adjustment | Non-Linearity | Hysteresis | Repeatability	

Thermal Effects | Offset and Span

Thermal Error	<± 0.2% FSO/K in Compensated Range -25 - 70°C | -13 - 158° F

Permissible Temperatures

Permissible Temperatures	**PVC** 32°F - 140°F | **PP** -4° - 178°F | **PVDF** -30 - 178 °F | **Storage** -10°C - 60°C

Electrical Protection

Short-Circuit Protection	Permanent
Reverse Polarity Protection	No Damage to Sensor
Electromagnetic Compatibility	Emission Immunity According to EN 61326
Short-Circuit Protection	Permanent

Electrical Connection

Jacketed Cable	PTFE (Teflon®) | 0 - 200°F
3 Wire Cable with Integrated Air Tube for Atmospheric Pressure Reference	

Materials | Wetted

Housing	PVC | PP | PVDF
Seals	FFKM - Kalrez®
Diaphragm	Ceramic $Al_2 0_3$

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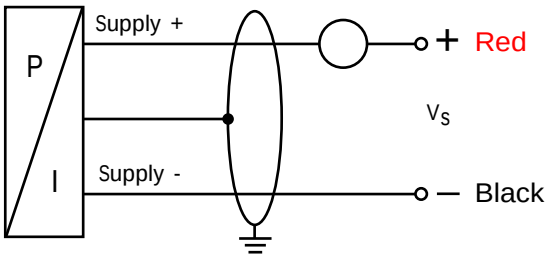
Wiring Schematic



2-Wire-System | 4-20mA

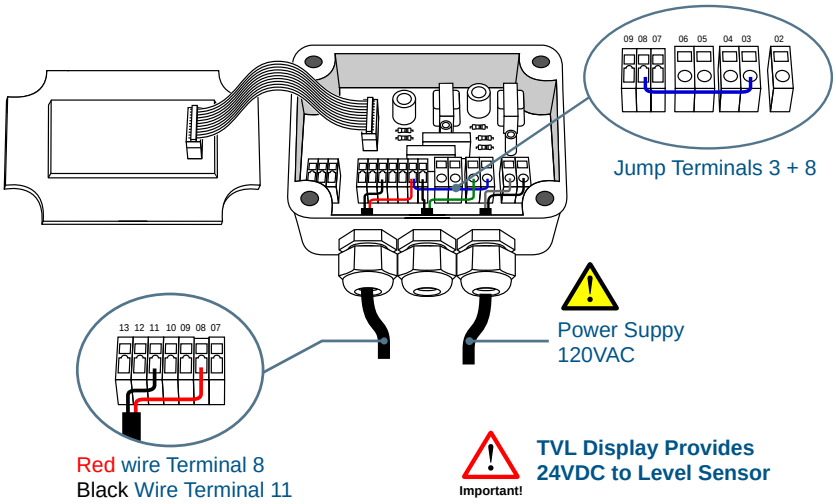
Electrical Connection

24VDC	Cable Colours
Supply +	Red
Supply –	Black
Shield	Yellow

Wiring Terminals

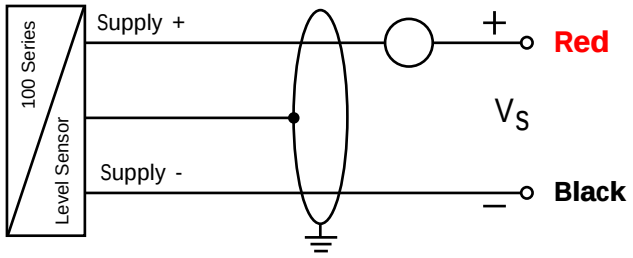
Important! **Sentinel LTE Telemetry Supplies Power to Level Sensor**

Sentinel LTE + 100 Series Level Sensor

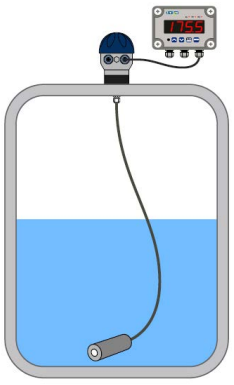


Wiring Schematic

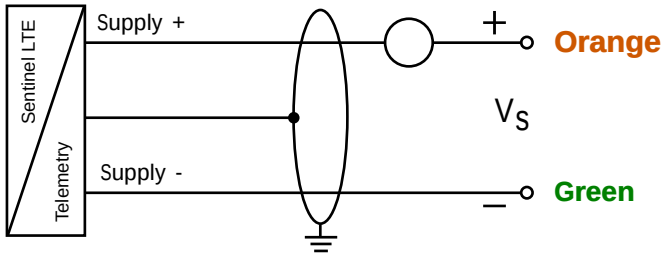
100 Series Submersible



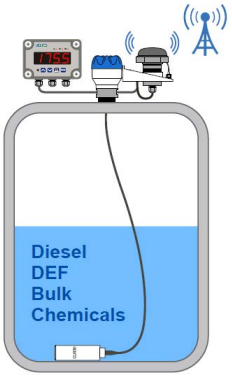
2-Wire-System | 4-20mA



Sentinel LTE Telemetry



2-Wire-System | 4-20mA



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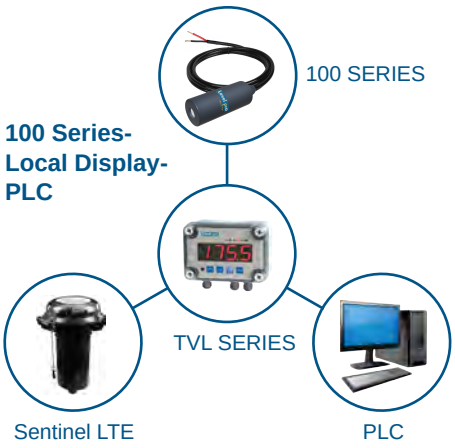
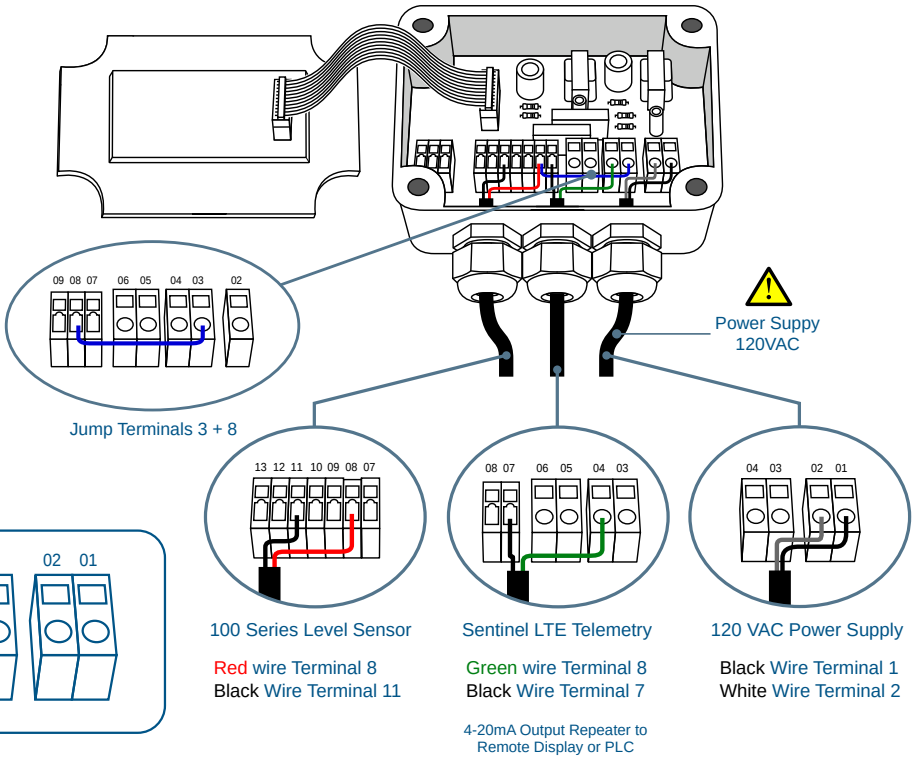
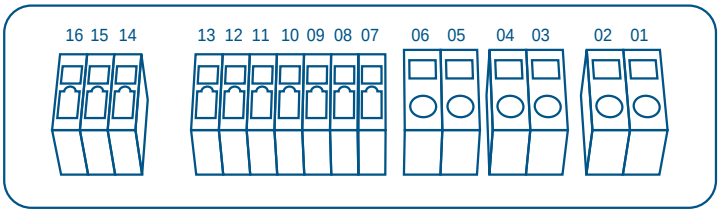
Wiring Terminals - TVL SERIES







Ordering Code 100 Series

Pressure																									
	ft/H20	1	9	1																					
Input	**ft/H20**																								
	14.0				1	4	0	1																	
	20.0				1	2	0	1																	
	34.0				1	0	0	1																	
	54.0				4	0	0	1																	
Housing									100 Series Level Sensor			Sentinel LTE Telemetry			120 VAC Power Supply										
	PVC								A																
	PP									B															
	PVDF											E													
Cable Length																									
	M-Meters,																								

Note : Consult Factory for Different Level Ranges | example : 0 - 34' Range - 15M Cable Length

* Cable Comes Equipped with Integrated Air Tube for Atmospheric Pressure Reference

DC Power Only

RoHS Compliant CE