

- 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

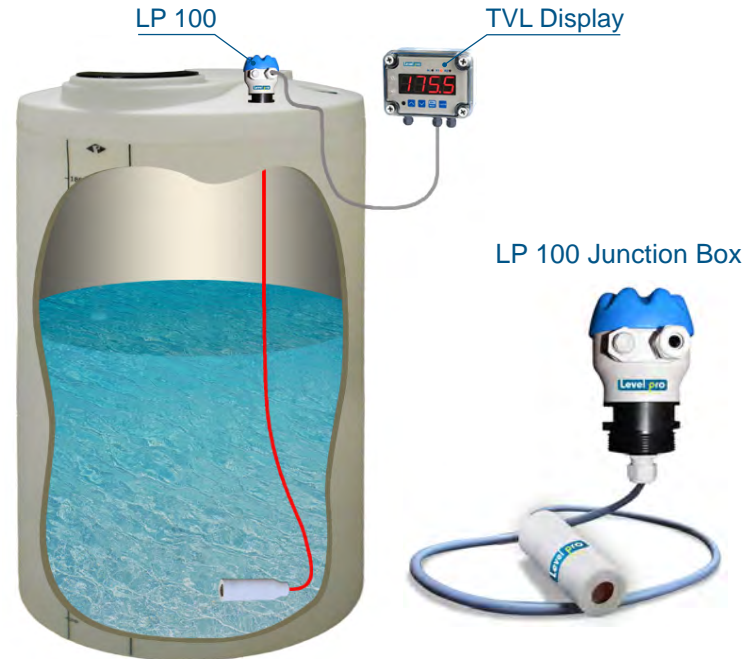
RoHS
Compliant

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**

Input Pressure Range

Level ft/H ₂ O		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
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Performance

Accuracy	<± 0.5% Full Scale or Better
Permissible load	$R_{max} = [(V_s - V_{smin}) / 0.02 \text{ A}]$
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
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Permissible Temperatures

Permissible Temperatures	PVC 32°F - 140°F PP -4° - 178°F PVDF -30 - 178 °F Storage -10°C - 60°C
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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 O ₃

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

Red wire Terminal 8
Black Wire Terminal 11

Power Supply 120VAC

Important! TVL Display Provides 24VDC to Level Sensor

Wiring Schematic

100 Series Submersible

2-Wire-System | 4-20mA

Sentinel LTE Telemetry

2-Wire-System | 4-20mA

