

# 100 Series

## Continuous Submersible Level Sensor



### LP100 Junction Box

Sold Separately



### Features

- ✓ Higher Accuracy:  $\pm 0.5\%$
- ✓ Superior Chemical/Corrosion Resistance
- ✓ PVC | PP | PVDF | 316 SS | PTFE Teflon®
- ✓ Teflon® Jacketed Cable
- ✓ Kalrez® O-Ring Seal
- ✓ Works on Foam | Vapor | Turbulence | Condensate
- ✓ Integrally Molded Internal Weight | No Floating
- ✓ IP68 | NEMA 4X Enclosure

## The Solution to Tough Applications Where Ultrasonic Sensors Simply DO NOT WORK!

The LevelPro® 100 Series continuous submersible level transmitter and tank level junction box are a perfect pair for applications where ultrasonic sensors aren't going to work.

Accurately measure tank levels with this rugged combination that's simple to use and boasts superior chemical resistance along with industry exclusive features.

### 100 Series

Ceramic Sensing Diaphragm

Teflon® Jacketed Cable



### Displays

The 100 Series can be connected to one of our many displays or to an existing PLC.

#### ShoPro® SP100 Series

- All in One Controller
- NEMA 4X Enclosure + Cord Grip
- Power Supply Output: 24 VDC
- Optional Audio & Visual Alarms



PVC

PP

PVDF

PTFE

316SS



# 100 Series

## Continuous Submersible Level Sensor



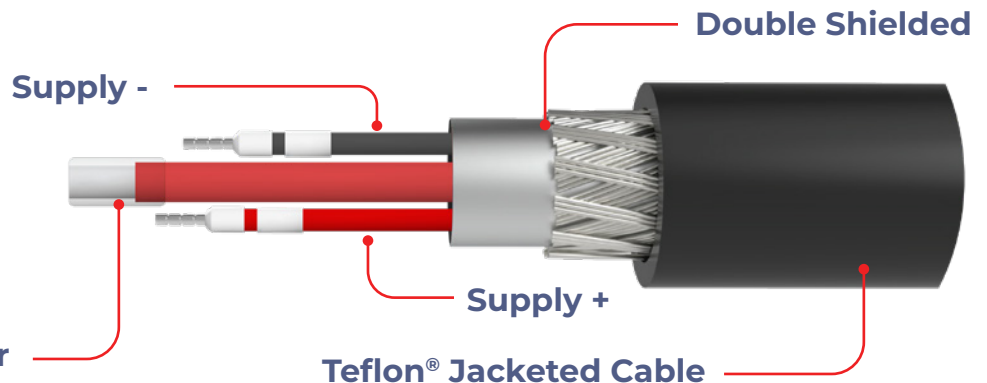
### Specifications

Input Pressure Range	
Level ft/H <sub>2</sub> O	14   20   34   54 *Consult Factory for Levels > 54 ft
Overpressure   Psi	210   290   290   380
Output Signal   Supply	
Output Signal	4-20mA   4-20mA + Hart 2 Wire   0.5-4.5 VDC Ratiometric   0-5 VDC   RS-485 3 Wire
Power Supply	9-36 VDC   0.5-4.5VDC   5VDC
Performance	
Accuracy	<±0.5% of FS
Permissible Load	$R_{max} = [(V_s - V_{smin}) / 0.02 A] \Omega$
Influence Effects	Supply: 0.05% Full Scale/10V   Load: 0.05% Full Scale/K $\Omega$
Long Term Stability	<± 0.1% Full Scale over One Year
Response Time	<10 msec
Thermal Effects   Offset and Span	
Thermal Drift	<± 0.02% FSO/K in Compensated Range   -20 – 170°F
Permissible Temperatures	
Storage/Media Temperatures	PVC: 32°F – 140°F   PP: -20°F – 170°F   PVDF: -40°F – 170°F   PTFE: -40°F – 170°F   316 SS: -40°F – 170°F
Electrical Protection	
Short-Circuit Protection	Permanent
Reverse Polarity Protection	No Damage to Sensor
Electromagnetic Compatibility	Emission Immunity According to EN 61326
Electrical Connection	
Jacketed Cable	PTFE   Teflon -40 – 200°F
3-Wire Cable with Integrated Air Tube for Reference to Atmospheric Pressure	
Materials   Wetted	
Housing	PVC   PP   PVDF   PTFE   316 SS
Seal	FFKM - Kalrez®
Diaphragm	Pure Ceramic 96% Al <sub>2</sub> O <sub>3</sub>   316 SS
General	
Current Consumption	Max. 25mA
Weight   Grams	PVC   575g   PP   475g   PVDF   825g   PTFE 875g   316 SS   875g
Ingress Protection	IP 68   NEMA 4X
CE-Conformity	EMC Directive: 2004   108   EC

\*Contact Factory for different options

### Wiring

24VDC	Color
Supply +	Red
Supply -	Black



Capillary with Gortex® Breather

Teflon® Jacketed Cable

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### Model Selection

191 - 1401 - A 1133 05

Range (ft/H <sub>2</sub> O)	Housing	Cable Length
<b>1401:</b> 14.0	<b>A:</b> PVC	<b>05:</b> 5m
<b>1201:</b> 20.0	<b>B:</b> PP	<b>15:</b> 15m
<b>1001:</b> 34.0	<b>E:</b> PVDF	(Consult factory for additional lengths)
<b>4001:</b> 54.0	<b>T:</b> PTFE	
	<b>SS:</b> 316 SS	



### Frequently Ordered With:

#### LP100

Levelpro LP100 Series Junction Box, PP Material, Viton VaporBloc®, NEMA 4X, 2" NPT Connection, Gortex Breather



#### SP100

Levelpro ShoPro Series LED Display & Controller, 4-20mA Input, NEMA 4X Enclosure, Wall Mount, 120VAC

Optional Audio & Visual Alarms

