

# LevelPro® — 200C Series

## Continuous Submersible Level Sensor Transmitter | Capacitive Ceramic

- ✓ Superior Chemical Resistance
- ✓ Works on Foam | Vapor | Turbulence | Condensate
- ✓ Intergrally Molded Internal Weight — No Floating



### A Submersible Level Sensor for the Toughest Industrial Applications.

The 200C Series Submersible Level Sensor Transmitters are engineered to provide an accurate and continuous level measurement for both corrosive and non-corrosive liquids.

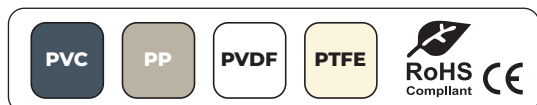
Featuring an intergrally molded weight, the 200C Series sensor is made to sit and remain at the bottom of the tank while measuring the head pressure of the liquid pushing down on its ceramic diaphragm.

Aside from being the industry's simplest and most reliable level sensor, the 200C Series is the perfect solution for tough applications where ultrasonics will not perform.

### Capacitive Ceramic Sensing Technology

Capacitive Ceramic is designed for Continuous Level Measurement of aggressive liquid media.

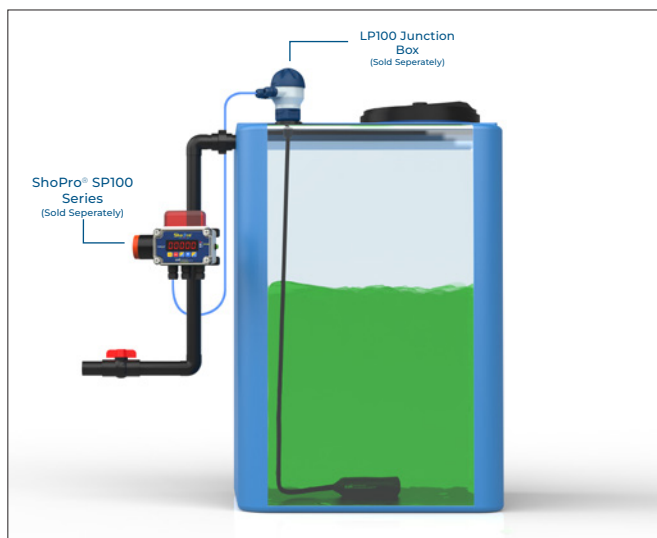
- ✓ Superior Chemical Resistance
- ✓ Larger Sensing Area
- ✓ Suitable for Viscous Media



### Features

- ✓ Higher Accuracy:  $\pm 0.25\%$  Full Scale
- ✓ Lower Temp. Range |  $-40^{\circ}\text{F}$
- ✓ Flush Sensor — Non-Clogging Design
- ✓ No Programming Required | No Moving Part
- ✓ Kalrez® (FFKM) O-Ring Seal
- ✓ PTFE Teflon® Coated Cable
- ✓ NEMA 4X Epoxy Coated Housing
- ✓ Capable of Measuring Liquid Levels 150 ft.
- ✓ No Lost Signals
- ✓ No Dead-Bands

### Working Principle



### Model Selection

200C Continuous Submersible Level Sensor		
Size	Part Number	Material
0-34ft   11m	200C-1001-A113315	PVC
0-34ft   11m	200C-1001-B113315	PP
0-34ft   11m	200C-1001-E113315	PVDF
0-34ft   11m	200C-1001-T113315	PTFE

#### 200C-1001-A113315

Range (ft)	Housing	Output	Cable Length
1401 : 14.0	A : PVC	1 : 4-20mA	05 : 5m
1201 : 20.0	B : PP	2 : Ratiometric	10 : 11m
1001 : 34.0	E : PVDF	3 : Voltage	15 : 15m
4001 : 54.0	T : PTFE	4 : RS485	20 : 20m

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### Specifications

#### Input Pressure Range

Level ft/H <sub>2</sub> O	14	20	34	54
Overpressure	14X	14X	10X	10X

#### 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	4-20mA	24 VDC	0.5-4.5 VDC Ratiometric	0.5-4.5VDC } 5VDC	RS-485 HART } 24VDC

#### Performance

Accuracy	<±0.5% of F.S
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	<150 msec or better

#### Thermal Effects | Offset and Span

Thermal Drift	<± 0.02% FSO/K in Compensated Range   -20°F to 178°F   -28°C to 81°C
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#### Permissible Temperatures

Storage/Media Temperatures	PVC:	32 to 140°F	PP:	-20 to 178°F	PVDF:	-40 to 212°F	PTFE:	-40 to 212°F
		0 to 60°C		-28 to 81°C		-40 to 100°C		-40 to 100°C

#### 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 to 200°F   -40 to 93°C
3-Wire Cable with Integrated Air Tube for Reference to Atmospheric Pressure	

#### Materials | Wetted

Housing	PVC   PP   PVDF   PTFE Teflon®
Seal	FFKM - Kalrez®
Diaphragm	Pure Ceramic 99.9% Al

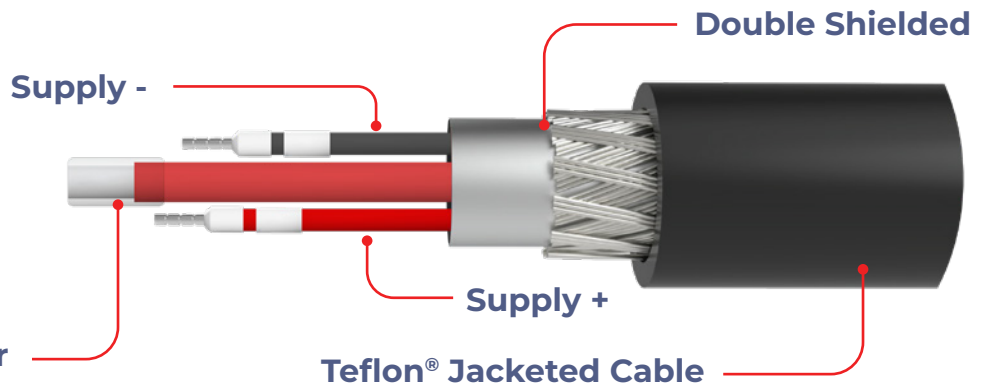
#### General

Current Consumption	Max. 25mA
Weight   Grams	316 SS   875g
Ingress Protection	IP 68   NEMA 4X
CE-Conformity	EMC Directive: 2004   108   EC

### Wiring

24VDC	Color
Supply +	Red
Supply -	Black

Capillary with Gortex® Breather



# LevelPro® — 200C Series

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### LP100 Junction Box



### Frequently Ordered With:

- **SP100**  
LevelPro® ShoPro® Series LED Display & Controller, 4-20mA Input, NEMA 4X Enclosure, Wall Mount, 120VAC
- **LP100**  
LevelPro® LP100 Series Junction Box, PP Material, Viton VaporBloc®, NEMA 4X, 2" NPT Connection, Cortex® Breather

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

The LevelPro® 200C Series submersible level sensor 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.



### 200C Series

### Ceramic Sensing Diaphragm



**VaporBloc®**  
Eliminates Vapor from  
Entering Junction Box

### Teflon® Jacketed Cable

### VaporBloc® Technology

- ✓ Blocks Out Corrosive Chemical Fumes
- ✓ Pressure Tested to 75 Psi
- ✓ Protects Internal Wiring Connections

### Displays

The 200C Series can be easily 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