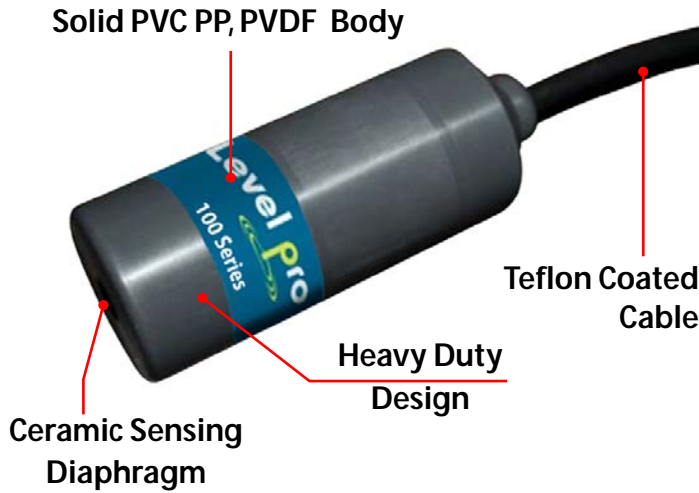


# The Solution to Tough Level Applications "Where Ultrasonics Sensors Simply DO NOT WORK!"

## ALL PLASTIC DESIGN



## Commercial Series Heavy Duty Industrial Level Transmitter

PVC, PP, PVDF Plastic Transmitter  
for Aggressive Fluids

PVC, PP, PVDF Body  
**(Corrosion Resistant)**

The **100 Series Pressure Transmitter** is designed for Continuous Level Measurement for **Aggressive Liquid Media**. - No Lost Signals

## Applications

### Sewage



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

### Aggressive media



- Acids + Base
- Pits
- Chemical Tanks
- Plating Tanks
- PH Control Tanks
- Storage Tank Monitoring

- ▶ **Excellent for All Tanks/Sumps-Large (54") or Small (14")**
- ▶ **The Solution to Tough Applications where Ultrasonics Sensors Simply DO NOT WORK!**
- ▶ **No Lost Signals**

## Pressure Measurement

- ▶ Tanks / Sumps 0-14ft / H<sub>2</sub>O up to 54ft / H<sub>2</sub>O

## Output Signal

- ▶ 2 wire: 4-20 mA

## Features

- ▶ Compact Design
- ▶ Low Cost
- ▶ Excellent Long Term Stability
- ▶ High Accuracy
- ▶ Flush Sensor - Non Clogging Design
- ▶ Heavy Duty PTFE Cable (5m, 10m, 15m) Length - Other Lengths Available
- ▶ Excellent for Foam, Vapor or Condensate
- ▶ Ceramic Sensing Diaphragm
- ▶ Heavy Duty Rugged Design
- ▶ No Moving Parts
- ▶ Automatic Temperature Compensation

### Input Pressure Range

Level ft/H <sub>2</sub> O		14.0	20.0	33.5	54
Overpressure	PSI	2.1	29	29	58
Burst Pressure >	PSI	29	58	58	72

### Output Signal/Supply

Standard	2-wire: 4-20mA
----------	----------------

### Performance

Accuracy	<± 0.5% Full Scale or Better
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 or better
<sup>1</sup> 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	Medium Storage	PVC 0°C -60°C 32°F -140°F	PP -20°C -195°F	PVDF -30-200 F
		-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

Cable with sheath material	PTFE (Teflon®) (0 -200° F)
3 Wire Cable with integrated air tube for atmospheric pressure reference	

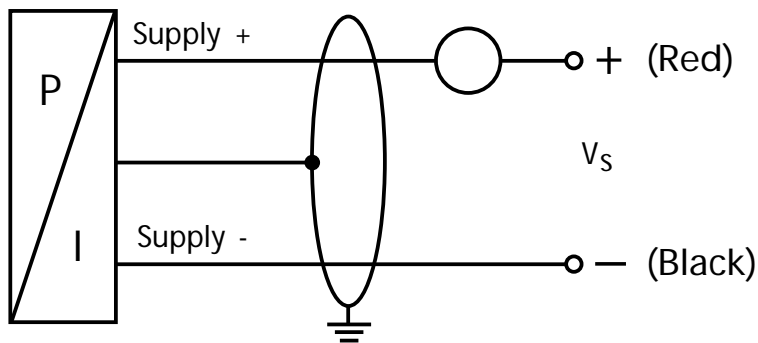
### Materials (wetted)

Housing	PVC, PP, PVDF
Seals	FKM
Diaphragm	Ceramic Al <sub>2</sub> O <sub>3</sub>

### Miscellaneous

Current Consumption	Max. 25 mA
Weight	approx. 200g (without cable)
Ingress Protection	IP 68
CE-Conformity	EMC Directive: 2004/108/EC

### Wiring Diagram



2-wire-system (current) 4-20mA

Electrical Connection	Cable Colours
	Supply + wh (Red)
	Supply - bn (Black)
	Shield (yellow)

**DC Power Only**



## Ordering Code 100 Series

		1	0	0																
<b>Pressure</b>																				
	ft/H <sub>2</sub> O	1	0	0																
<b>Input</b>		<b>ft/H<sub>2</sub>O</b>																		
	14.0	1	0	0	1															
	20.0	1	6	0	1															
	33.0	2	5	0	1															
	54.0	4	0	0	1															
<b>Housing</b>																				
	PVC					A														
	PP						P													
	PVDF							F												
<b>Diaphragm</b>																				
	Ceramics Al <sub>2</sub> O <sub>3</sub>						2													
<b>Output</b>																				
	4-20mA /2-wire							1												
<b>Seals</b>																				
	FKM (Standard)								1											
									3											
<b>Accuracy</b>																				
	≥0.5% over Full Scale									5										
<b>Electrical Connection</b>																				
	PTFE Teflon Coated cable <sup>1</sup>									1										
<b>Cable Length</b>																				
	M-Meters, F-Feet										9	9	9							
	15M Cable STD																			
<b>Special Version</b>																				
	3M		20FT		15M		50FT								3					
	5M		30FT													5				
	10M		40FT														1			
	x (consult)																		x	0

\* cable comes with integrated air tube for atmospheric pressure reference