

“Always On The Level”



ITC 900

Levelpro Submersible PVC Level Pressure Sensor

The Solution to Those Applications Where Ultra Sonic Sensors Don't Work!

Pressure

- ▶ from 0 ... 16 in/H₂O up to 0 ... 335 ft/H₂O

Output Signal

- ▶ 2-wire: 4 ... 20 mA

Features

- ▶ Two Piece Modular Design
 - ▶ Change Sensor Head Without having to rewire
 - ▶ Excellent Chemical Resistance
 - ▶ All Plastic PVC Rugged Design
 - ▶ Rugged
 - ▶ FEP Teflon® Cable Coated
 - ▶ Very Accurate > .25% (Option)
- Capable of Reading Tank/Sump Level 1.6ft - 335ft

The ITC 900 Series Modular Two-Piece All Plastic / PVC Submersible Probe is designed For Quick-Change-Outs. Replace Sensor Head - No Need to Change Wiring.

A Solution for Foam, Vapor & Condensate Applications.

Applications

Sewage

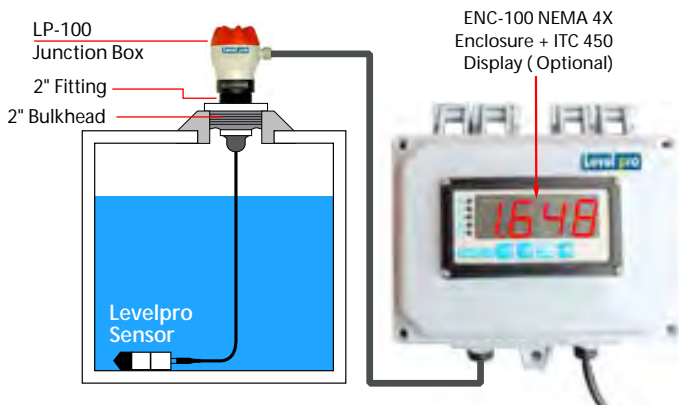


- Waste Water Treatment
- Chemical Dosing
- Leachate Collection

Aggressive media



- Sodium Hypochlorite
- Corrosive Chemicals
- Foam, Soaps
- Fuming Chemicals - HCL, Nitric



Input Pressure Range

Nominal pressure	PSI	2.3	3.6	5.8	8.7	14.5	23	36	58	87	10
Level	ft	5.0	8.0	14	20	33	54	84	134	200	335

Output Signal / Supply

Standard	2-wire: 4 ... 20 mA / VS = 9 ... 32 VDC
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Performance

Accuracy	Standard:	IEC 60770 1	
	option:	$< \pm 0.35 \% \text{ FSO}$ $< \pm 0.25 \% \text{ FSO}$	
Permissible load	$R_{\text{max}} = [(VS - VS_{\text{min}}) / 0.02 \text{ A}] \cdot \dot{U}$		
Influence effects	Supply: 0.05 % FSO / 10 V Load: 0.05 % FSO / kÜ		
Long term stability	$< \pm 0.1 \% \text{ FSO} / \text{year}$		
Turn-on time	700 msec		
Mean response	$< 200 \text{ msec}$	measuring rate 5/sec	
Max. response time	380 msec		
1 accuracy according to IEC 60770 – limit point adjustment (non-linearity, hysteresis, repeatability)			

Thermal effects (Offset and Span)

Thermal error	$< \pm 0.1 \% \text{ FSO} / 10 \text{ K}$ in compensated range 0 ... 50 °C
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Permissible temperatures

Permissible temperatures	medium:	5 - 140°F (-10 - 60 °C)
	electronic / environment:	5 - 140°F (-10 - 60 °C)
	storage:	5 - 140°F (-10 - 60 °C)

Electrical protection 2

Short-circuit protection	Permanent
Reverse polarity protection	No Damage, but also no function
Electromagnetic compatibility	Emission and immunity according to EN 61326
2 additional external overvoltage protection unit in terminal box KL 1 or KL 2 with atmospheric pressure reference available on request	

Electrical Connection

Cable with sheath material	FEP 5 - 140°F (-10 - 60 °C) black
Cable protection	Standard: without cable protection
3 cable with integrated air tube for atmospheric pressure reference	

Materials (media wetted)

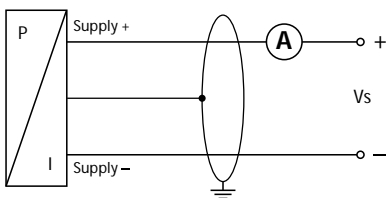
Housing	PVC
Seals	FKM (Standard)
Diaphragm	Standard : ceramics Al ₂ O ₃ 96 % Option : ceramics Al ₂ O ₃ 99.9 %

Miscellaneous

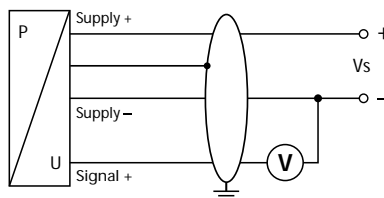
Current consumption	Max. 25 mA
Weight	approx.. 400 g (without cable)
Ingress protection	IP 68
CE – conformity	EMC Directive: 2004/108/EC

Wiring diagram

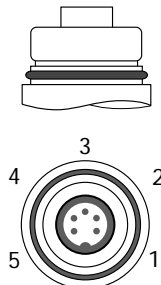
2-wire-system (current)



3-wire-system (voltage)



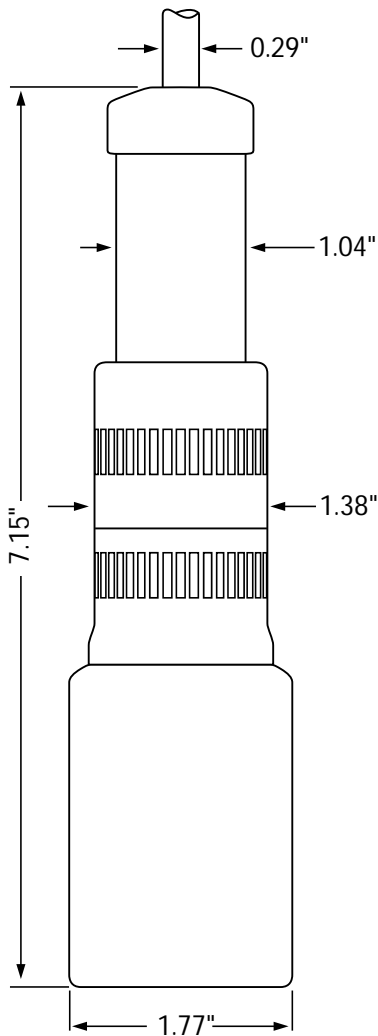
Connector



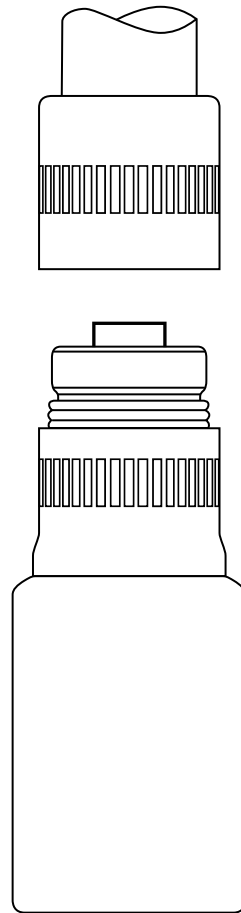
Pin configuration

Electrical Connection	Binder Series 723 4 (5-pin)		Cable Colours (DIN 47100)
	2 – wire	3 – wire	
Supply +	3	3	wh (white) bn (brown) gn (green)
Supply –	1	4	
Signal + (only for 3-wire)	-	1	
Shield	5	5	gn/ye (green / yellow)
4 in separated version			

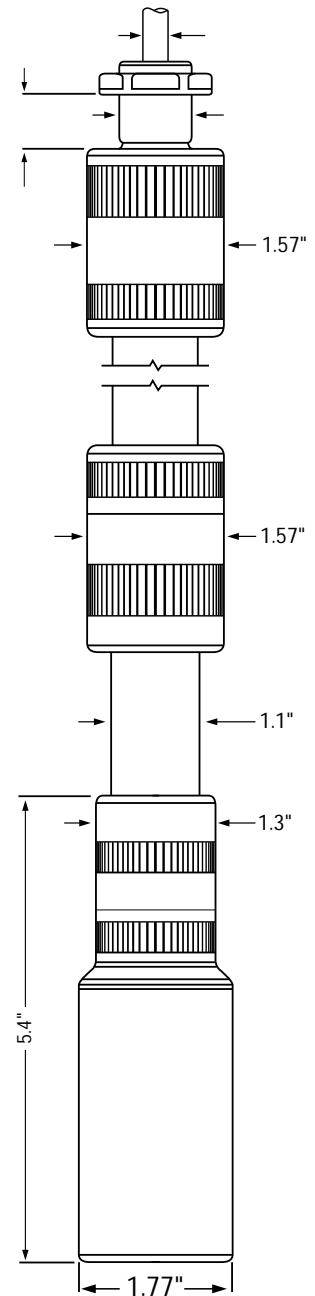
Dimensions (in)



Standard



Separated Version



Special Version for cable
Protection with PVC pipe

Ordering Code 900 Series

Pressure			PSI	9	0	0										
			ft/H ₂ O	9	0	1										
Input	ft/H₂O	PSI														
	1.6	2.3	1	6	0	0										
	0.8	3.6	2	5	0	0										
	14	5.8	4	0	0	0										
	20	8.7	6	0	0	0										
	33	14.5	1	0	0	1										
	54	23	1	6	0	1										
	84	36	2	5	0	1										
	134	58	4	0	0	1										
	200	87	6	0	0	1										
	335	100	1	0	0	2										
Housing			PVC	A												
Diaphragm			Ceramics Al ₂ O ₃ 96%	2												
			Ceramics Al ₂ O ₃ 99.9%	C												
Output			4 ... 20 mA / 2-wire	1												
				3												
				9												
Seals			FKM	1												
				3												
				9												
Electrical Connection			FEP Teflon® -cable 1	1												
				2												
				3												
				9												
Accuracy			Standard	0.35 %		3										
			Option	0.25 %		2										
Cable Length			in m	M-Meters,	F-Feet	9		9	9							
				Standard	5m, 10m, 15m											
					15ft, 30ft, 45ft											

