LSA01 LEVEL SWITCH

LSA01 shown with AX3 head and 3/4" NPT fitting.

LSA01 shown with PV9 head and 3/4" NPT fitting.

LSA01 shown with SS2 head and 3/4" NPT fitting.

CAPACITANCE LEVEL SWITCH SINGLE POINT DETECTION

Product Features

Capacitance level switch is be capable of:

- Detecting a single point, tip sensitive or at any point along the probe
- Detecting high or low level
- Detecting level of liquids, solids, slurries or foam
- Operating in any shape of metal type vessel
- Detecting the level of any material with dielectric constant greater than 1.5
- Operating in applications with temperatures up to 260°C (500 °F)

Capacitance level switch has:

- Microprocessor based electronics
- 12-36 Vdc supply
- Jacketed probes for conductive media and bare probes for non-conductive media
- Adjustable time delay for output
- LED to indicate output status
- Fully potted electronics
- Heavy duty industrial design
- Standard fitting of 3/4 NPT, special fitting or flange
- NEMA rated aluminum, stainless, PVC or explosion proof enclosure

Description:

INTEMPCO LSA01 series level switches are highly reliable microprocessor based sensors designed to alarm on the high or low condition of liquids and certain dry bulk media in metal tanks.
The LSA01 includes a transmitter housed in a rugged enclosure, a rigid probe up to 20 feet long and a fitting. Probe material is SS316, supplied bare or PFA jacketed. Additional standard features include and adjustable time delay, SPDT relay, LED relay status indication, and a simple push button calibration.

Operation:

The LSA01 senses level using RF capacitance measurement technique together with microcontroller technology for high resolution point level detection. A probe mounted in a vessel forms a capacitor with the vessel wall. The capacitance of the configuration is measured by the LSA01 and is used to provide point level switch control. Hi and low alarms are easily set with push-button convenience for differential level applications such as pump control. For vertical probes with a setpoint along the length of the probe, a consistent material dielectric will ensure a consistent and repeatable alarm point.

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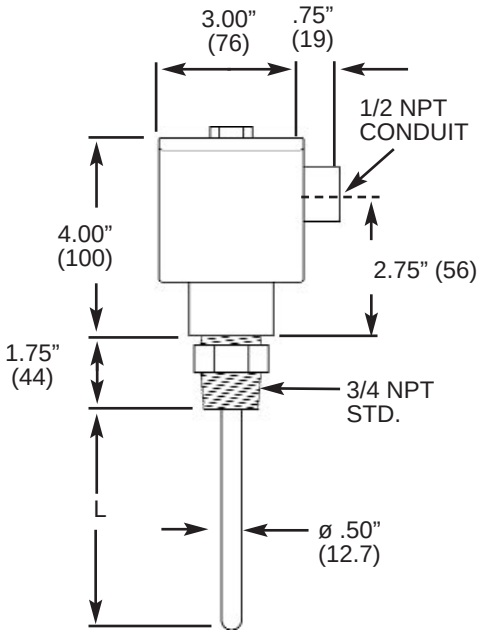
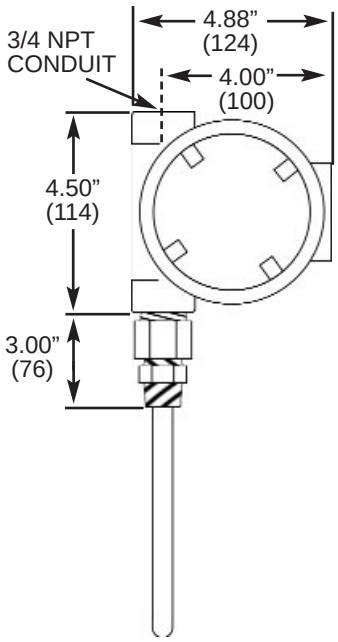
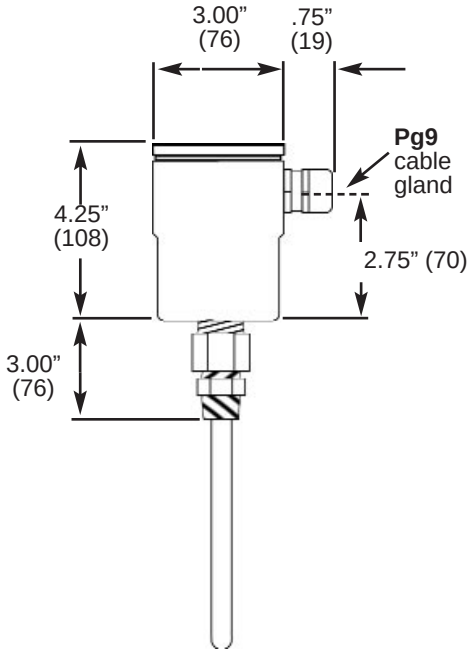


Shown With
SS2 Head



Shown With
AX2 Head



Shown With
PV9 Head

Dim. (xx) are in millimiters

Electrical Specifications

Supply Voltage:	:12 VDC - 36 VDC
Output:	:Relay, SPDT 0.5A@240 VAC
Calibration	:Via 2 push-button switches non-interactive settings
Capacitance range	:10 pF to 3900 pF
Sensitivity:	:0.5 pF
Accuracy	:±2 mm (±0.1") (constant dielectric)
Repeatability	:±0.1% of setting
Time delay	:0 - 30 sec
Ambient Temperature:	:-40 to 70 °C (-40 to 158 °F)

Mechanical Specifications

Enclosures	**AH2**	:Aluminum, lift cover type, NEMA 4
	SS2	:Stainless 316, NEMA 4
	AX3	:Class I, Gps. B,C&D, Class II, Gps. E,F&G, Class III, CENELEC: EExd IIC, IP66 NEMA 4, 7BCD, 9EFG
	CX3	:Class I, Class II, Div 2,Gps. C&G
Mounting Thread		:3/4 NPT standard
Process Temperature		:200°C max (392 F)-consult factory for higher temperatures
Pressure Limits (Model LSA01-...PH only)		:500 psi (34 bar) @ 25°C (77 °F) 250 psi (17 bar) @ 150°C (302 °F) 14.5 psi (1 bar) @ 200°C (392 °F)
Probe mat'l		:PFA Teflon jacketed, or bareSS 316

Ordering Information:

INTEMPCO MODEL	ENCLOSURE	PROCESS CONNECTION	PROBE MATERIAL	PROBE LENGTH "L" (20 feet Max.)
LSA01 -	ST -	_ _ _ -	_ _ _ _ -	_ _ _ -
				(in inches)

Enclosure	CODE
Explosion Proof	AX3
Explosion Proof	CX3
Aluminum Flip-cover	AH2
Stainless Steel	SS2
PVC (Pg9 Gland)	PV9

CODE	Fitting
P( )	Male pipe size 3/4 NPT std.
PH( )	Male pipe size high pressure 3/4 NPT std.
F( )	Flange, SS316 RF 150 Lb.
FS( )	Flange special specify

CODE	MATERIAL
A	Teflon jacketed solid probe
B	SS316 Bare solid probe