

Ameritrol, Inc.

Manufacturer of Industrial Instrumentation

ELECTRONIC LEVEL SWITCHES

Features

- No Moving Parts
- 316L Stainless Steel Sensor
- Top, Side, or Bottom Mounting
- Simple Calibration and Setup
- Lowest Cost, Designed for Industrial OEM and End Users



Applications

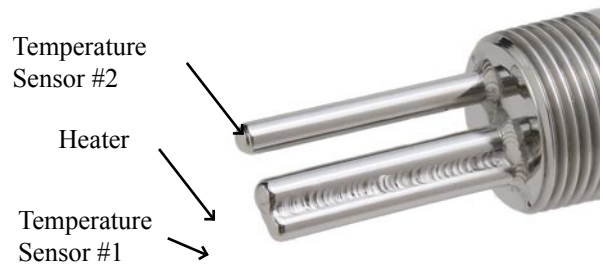
- High or Low Level Switch
- Liquid to Liquid Interfaces
- Detects Solids in Liquids
- Highly Viscous Products
- Differentiates Foam From Air or Liquids

LM Series

The LM series is designed to provide an extremely reliable level switch at a very cost effective price. This series replaces the standard explosion proof enclosure utilized in our LX series with a general purpose enclosure.

The principle of operation measures a temperature differential between a heated and a reference temperature sensor (see figure 1). The differential varies as the type of product surrounding the sensor changes. This allows the level switch to detect a greater number of different products than any other technology that is currently available. The different product types are shown on the next page of this brochure in the sensor output chart. The field adjustable set-point can be adjusted to detect any two products shown.

The electronics feature a SPDT relay switch output with options for power input of 120 VAC, 24 VDC or VAC, or 240 VAC. Calibration is easily performed by adjusting a potentiometer on the circuit board.

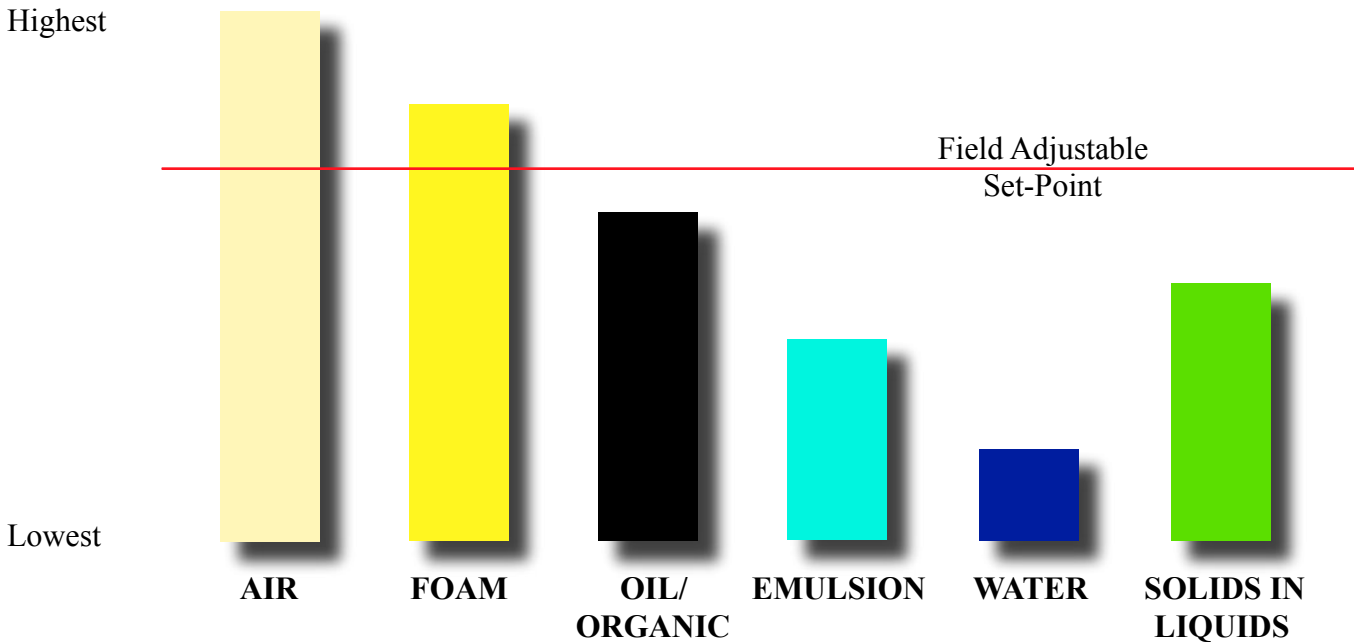


Temperature Differential = Temperature Sensor #1 Minus Temperature Sensor #2

Part Number/Order Entry Specification

	L	M	-						-			Probe Length
Process Connection	3/4" MNPT	0	7	5	0					0	1	1.2" PROBE
	1" MNPT	1	0	0	0					0	2	1.8" PROBE
Power Input	12 VDC (10.8-18VDC)											SPECIAL PROBE LENGTH, SPECIFY LENGTH IN INCHES
	117 VAC (90-135 VAC)											
	24 VDC or VAC (+/- 10%)											
	200-240 VAC											

Sensor Output (Temperature Differential) Based on Product Type



Specifications

Sensor Head

Material of Construction: 316L Stainless Steel Standard
 Operating Temperature: -50 to 250F (-46 to 121C)
 Operating Pressure: Vacuum to 4000 PSIG (275 Bar)
 Response Time: From 3 Seconds
 Repeatability: +/- 1/8" at Sense Point
 Process Connection: 3/4" MNPT, 1" MNPT
 Probe Length: 1.8", 1.2"; Option Customer Specified

Electronics

Housing: Powder Coated General Purpose
 Temperature: -50 to 150F (-46 to 65C)
 Power Input: 90-135 VAC, 50/60 Hz, 4 Watts
 Option 24 VDC/VAC, 200-240VAC
 Relay Output: SPDT 2 Amps Resistive
 Electrical Connection: 1" FNPT
 Shipping Weight: 4 lbs

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Bulletin LM-705

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