

# Magtech LT-1 Analog Level Transmitter

New and  
Improved!

## NEW FEATURES and BENEFITS

Magtech's LT-1 Level Transmitter has been redesigned for optimum performance and utilization.

- Linearized 4/20 mA Output
- Field Reversible 4/20 mA Output
- Field Reversible Unit (allows entire transmitter to be top or bottom mounted)

## PRINCIPLE OF OPERATION

The LT-1 Level Transmitter is designed for use with the LG Series Level gage to provide a 4-20 mA control signal proportional to level. The transmitter mounts externally to the gage chamber and consists of a sensor tube made up of a series of resistors and magnetically operated reed switches. There is a switch and resistor every 1/2 inch along the length of the sensor tube (1/4 inch resolution option is available.)

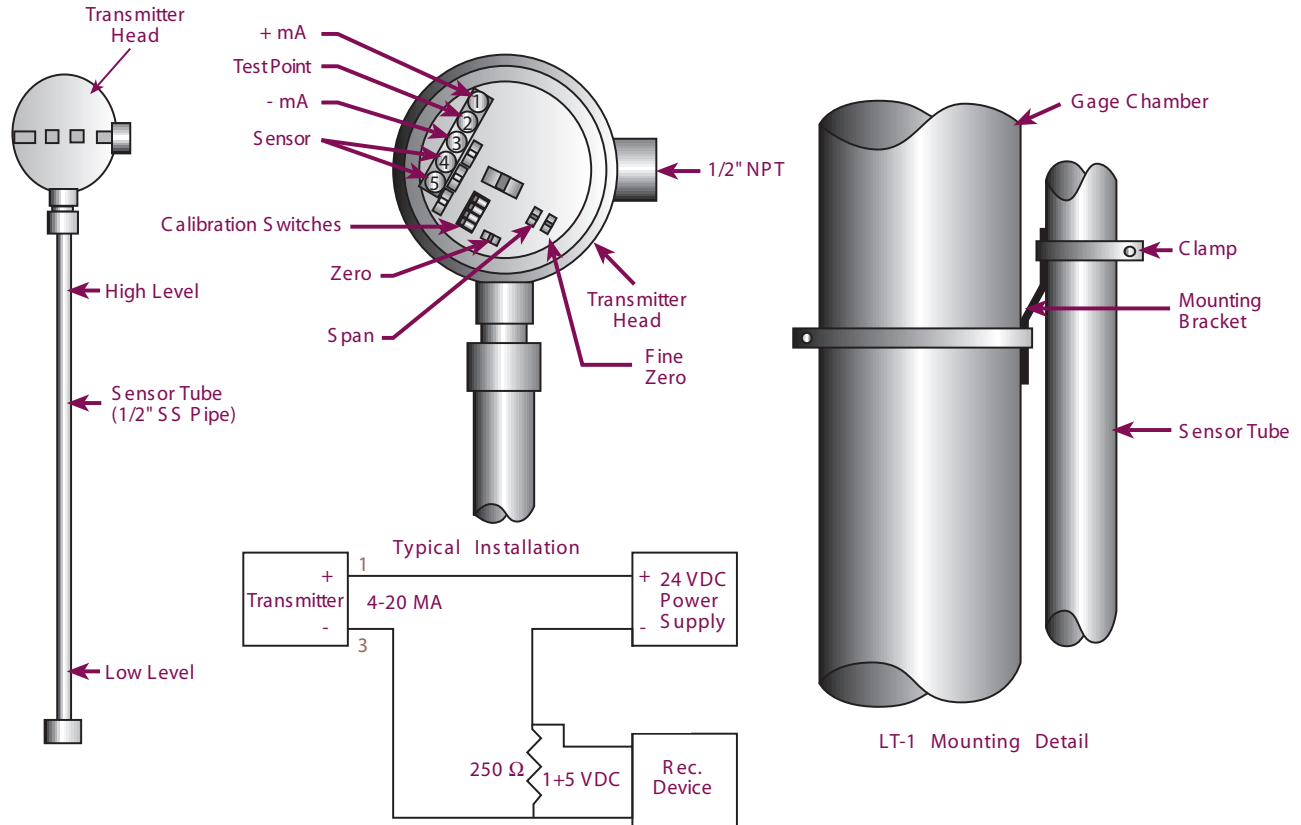
The circuit board containing the resistors and switches may be the same length as the measured range or any portion thereof. The sensor circuit is housed in the stainless steel sensor tube. This housing is rated for Class 1, Division 1, Groups B, C & D hazardous areas. The LT-1 assembly may be made intrinsically safe by remote mounting of the transmitter in a safe area and operating the sensor through an approved safety barrier.

As the magnetic float inside the gage chamber rises with increasing fluid level, the switches close, thereby changing the resistance in the circuit. A 2-wire, loop powered transmitter converts this resistance change to a 4-20 mA current signal corresponding to fluid level.

Resolution of the transmitter is 1/2 inch or 1/4 inch (proportional to the spacing of the sensor switches).



# WIRING and MOUNTING



## SPECIFICATIONS

- Sensor Probe:**
  - Length: up to 30 feet standard
  - Resolution: 1/2 inch (1/4 inch optional)
  - Material: 316SS material
  - Operating Temp.: to 600° F (process fluid)
- Transmitter:**
  - Output: 4-20 mA (2-wire)
  - Load: 750 ohms max.
  - Power: 24 VDC nominal
  - Housing: Explosion-proof, Class 1, Div. 1, Grps. B, C & D
  - Temperature: 150° F (inside housing) \*
- Complete assembly is UL, C-UL & CSA listed for Class 1, Div. 1, Grps. B, C & D
  - \* Note: For higher temperature applications, transmitter should be mounted away from level chamber and sensing element. See manual for high temperature transmitter mounting.

## ORDER INFORMATION

LT-1 - 4/20 -  -

Length (in.)

Options

R - Remote Transmitter  
 RL - Remote Transmitter w/ Digital Indication  
 AV - Reverse Action (top or bottom mounted)  
 T4 - 4-wire, 110 VAC Supply

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