

Magnetic Float Level Transmitter

MF-LT Series



LEVEX

Industrial Level Sensing Solutions

Magnetic Float Level Transmitters | MF-LT Series

Product Description

LEVEX MF-LT magnetic float level transmitters provide continuous liquid level measurement for industrial tanks and vessels. The transmitter uses a magnetic float moving along a stem that contains a series of magnetic sensing elements and precision resistors form a resistance ladder. The float position* is converted into a proportional electrical signal, delivering accurate and stable level measurement.

The MF-LT series is designed for integration with PLCs, indicators, and controllers using standard industrial analog outputs such as **4–20 mA**, **0–10 V**, or **resistive output**.

**The magnetic float could be removed if the tank gauge has an internal magnetic float.*

Key Features

- Continuous level measurement (not point switching)
- Standard industrial outputs: 4–20 mA, 0–10 V, or resistance
- High reliability and long-term stability
- Stainless steel, TEFLON, or plastic wetted parts
- Custom probe lengths up to several meters
- Suitable for harsh industrial environments
- Easy installation and minimal maintenance

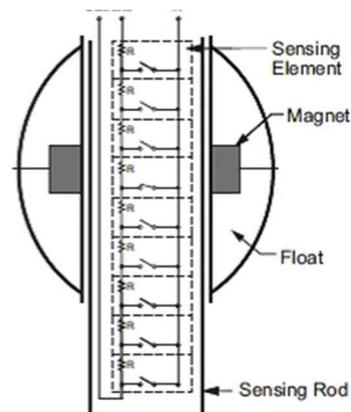
Typical Applications

- Tank level monitoring
- Process control systems
- Water and wastewater treatment
- Fuel and oil storage tanks
- Chemical processing
- Industrial automation and SCADA systems

Operating Principle

A magnetic float moves vertically along the transmitter stem according to liquid level. Inside the stem, a series of magnetic sensing elements and precision resistors form a resistance ladder. As the float moves, different sensing elements are activated, producing a resistance proportional to the liquid level.

An internal signal conditioning circuit converts this resistance into a standard analog output such as 4–20 mA or 0–10 V, representing the measured level continuously.



Specifications

Parameter	STAINLESS STEEL (std.)	PVC	TEFLON
Wetted material	STAINLESS STEEL	PVC	TEFLON
Probe length	200~4000mm	200~4000mm	200~2000mm
Process connection	NPT 2.5" (std.)	Flange (std.)	
Enclosure	Aluminium, TEFLON, SS, plastic		
Supply voltage	12-24VDC (for the 4-20mA) / 16-24VDC (for the 0-10V)		
Output signal	4–20 mA / 0–10 V / resistance		
Resolution options*	1 cm or 2 cm		
Repeatability	±1 cm or ±2 cm typical (same value as resolution)		
Response time	<500 mSec		
Zero/ Span set	Using a multi-turn trim POT		
Process temp.	-20 °C to +80 °	-20 °C to +60 °	-20 °C to +80 °
Ambient temp.	-20 °C to +60 °C		
Storage temp.	-40 °C to +60 °C		
Humidity	0–95 % RH (non-condensing)		

* Resistance output type models are 1.3cm resolution option only.

Ordering Information

Model Coding: LEVEX-MF-LT-[Output]-[Resolution]-[Length]-[Material]-[Connection]

Example: **LEVEX-MF-LT-V-2cm-1000-SS-Flange**

Specify:

1. Output: [A:4-20mA, V:0-10V, R:Resistance]
2. Required resolution [1 cm or 2 cm]
3. Probe length: 200~4000mm
4. Wetted material: [STAINLESS STEEL, PVC, TEFLON]
5. Process connection: [Flange, Screw, custom]

* Level indicator+ controller **FLC_V1.4E** with up to 4 SPDT Programmable outputs is available for order separately.

Warranty

12 months from delivery against manufacturing defects.

Legal Disclaimer & Notice

Legal Disclaimer

The information contained in this document is provided for general guidance and technical reference purposes only. All specifications, descriptions, drawings, and performance data are subject to change without prior notice.

LEVEX products are supplied **“as is”** and are intended for use by qualified personnel familiar with industrial instrumentation and control systems. It is the responsibility of the user, installer, or system integrator to verify the suitability of the product for the intended application, operating conditions, and safety requirements.

LEVEX shall not be liable for any direct, indirect, incidental, or consequential damages resulting from improper selection, installation, use, or maintenance of the product.

Specification Change Notice

LEVEX reserves the right to modify product specifications, materials, dimensions, electrical characteristics, firmware, and performance parameters **without prior notice**, in the interest of continuous product improvement.

Actual product characteristics may differ from those described in this document depending on configuration, application conditions, and optional features.

Application Responsibility

The user is solely responsible for:

- Selecting the appropriate sensor type and configuration
- Ensuring compatibility with the process medium, temperature, pressure, and environment
- Verifying compliance with local safety regulations and standards
- Performing proper installation, calibration, and periodic inspection

LEVEX does not assume responsibility for system design, redundancy requirements, or safety interlocks.

Warranty Reference

Warranty terms are governed exclusively by the commercial agreement or quotation issued at the time of sale.

This document does not constitute a warranty or guarantee of performance.