

Magnetic Float Fuel Tank Sender

MF-TS Series



LEVEX

Industrial Level Sensing Solutions

Magnetic Float Level Transmitters | MF-LT Series

Product Description

LEVEX MF-TS magnetic float fuel tank sender provide continuous liquid level measurement for fuel tanks and vessels. The sender 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-TS series is designed for integration with Fuel gauges, indicators, and controllers using standard **resistive output**.

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

Key Features

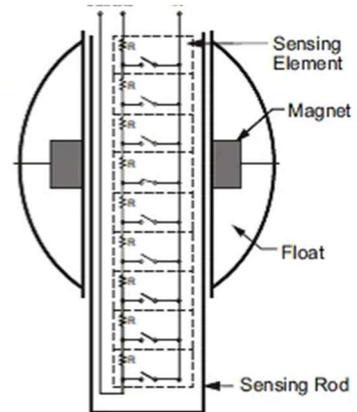
- Continuous level measurement (not point switching)
- High reliability and long-term stability
- Stainless steel wetted parts
- Custom probe lengths
- Suitable for harsh environments
- Easy installation and minimal maintenance

Typical Applications

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

Operating Principle

A magnetic float moves vertically along the sender stem according to fuel 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.



Specifications

Parameter	STAINLESS STEEL (std.)
Wetted material	STAINLESS STEEL
Probe length	200~2000mm
Process connection	NPT 2.5" (std.)
Enclosure	Aluminium, TEFLON, SS, plastic
Output signal	0-90 Ohm/ 10-180 Ohm/ 33-240 Ohm
Current ratings	0.5A (MAX) @ 12/24VDC
Resolution options	1.3cm (std.) or 2.6 cm
Repeatability	±1.2 cm or ±2.6 cm typical (same value as resolution)
Response time	<50 mSec
Fuel/ Liquid temp.	-20 °C to +80 °
Ambient temp.	-20 °C to +60 °C
Storage temp.	-40 °C to +80 °C
Humidity	0-95 % RH (non-condensing)

Ordering Information

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

Example: **LEVEX-MF-LT-V-1.3cm-640 -Flange**

Specify:

1. Output: [A:0-90 Ohm, B:33-180 Ohm, C: Custom]
2. Required resolution [1.3cm or 2.6cm]
3. Probe length: 200~2000mm
4. 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.