

# Radar Level Transmitter (HART)

## 589125 (46931-10)

**FESTO**

**LabVolt Series**

Datasheet



\* The product images shown in this document are for illustration purposes; actual products may vary. Please refer to the Specifications section of each product/item for all details. Festo Didactic reserves the right to change product images and specifications at any time without notice.

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## Table of Contents

<b>General Description</b>	<b>3</b>
<b>List of Manuals</b>	<b>3</b>
<b>Table of Contents of the Manual(s)</b>	<b>3</b>
<b>Specifications</b>	<b>3</b>

## General Description

The Radar Level Transmitter is a level measurement device using electromagnetic waves to detect the level of liquid in the column of the Pressure, Flow, Level, and Temperature Process Training Systems. The Radar Level Transmitter includes a horn antenna to direct the signal and a transmitter supporting either the HART or FOUNDATION Fieldbus communication protocols. The device can be configured manually via its alphanumeric display and push-buttons, but as it is difficult to efficiently program the transmitter's advanced functions on the device's display, acquiring a Software Configurator (Model 46982) is required.

The Radar Level Transmitter is a noncontact sensor, in the industry it is usually used in corrosive environments. Changes in the density, conductivity, and composition of the process fluid do not affect this sensor.

Available Radar Level Transmitters:

- 46931-1: Radar Level Transmitter (HART)
- 46931-D: Radar Level Transmitter (FOUNDATION Fieldbus)

## List of Manuals

Description	Manual number
Radar Level Transmitters (Workbook) _____	589760 (52200-00)
Radar Level Transmitters (Workbook (Instructor)) _____	589762 (52200-10)

## Table of Contents of the Manual(s)

### Radar Level Transmitters (Workbook) (589760 (52200-00))

- 1 Fundamentals of Radar Level Transmitters

## Specifications

Parameter	Value
<b>Model</b>	Micropilot FMR51
<b>Communication Protocol</b>	HART
<b>Ratings</b>	
Power Input	24 V dc
Operating Frequency	~26 GHz
Measured Variable	Level (via time-of-flight)
Accuracy	±2 mm
Sensor Operating Temperature	-40°C to 80°C (-40°F to 176°F)
Process Temperature	-196°C to 450°C (-321°F to 842°F)
Sensor Operating Pressure	Vacuum to 16000 kPa (Vacuum to 2320 psi)
Blocking Distance	200 mm (7.9 in)

Reflecting the commitment of Festo Didactic to high quality standards in product, design, development, production, installation, and service, our manufacturing and distribution facility has received the ISO 9001 certification.

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