


## Product Brief

# Level Plus<sup>®</sup> Model LLE

Magnetostrictive Liquid Level Transmitters with Temposonics<sup>®</sup> Technology

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- ▶ **Compact Level Measurement**
  - ▶ **Inherent Accuracy  $\pm 0.5$  mm**
  - ▶ **No Scheduled Maintenance or Recalibration**
  - ▶ **Optional Integral Temperature Measurement**

The Level Plus<sup>®</sup> LLE satisfies the demand for an accurate and robust liquid level transmitter for general purpose applications. The LLE can provide product level and/or interface level in a compact mechanical design. The LLE can also be ordered with an optional temperature measurement of a straight RTD output. There is no requirement for scheduled maintenance or recalibration for the expected 10 year life of the sensor. ***Set it and Forget it.***

The LLE liquid level transmitter can be mounted on most tanks offering NPT and RF flanged connections from  $\frac{3}{4}$  to 6 inches. The LLE also offers a variety of outputs including analog, CANbus, SSI and IO-Link. Included in the model number is the selection of float, cable, and stop collar options. The single model offers everything needed for level measurement in a variety of applications.

### FEATURES

- Product and Interface Level
- No scheduled maintenance or recalibration
- Inherent Accuracy  $\pm 0.5$  mm
- IP69K
- 100 g Shock/15 g Vibration
- Optional Integral Temperature Measurement

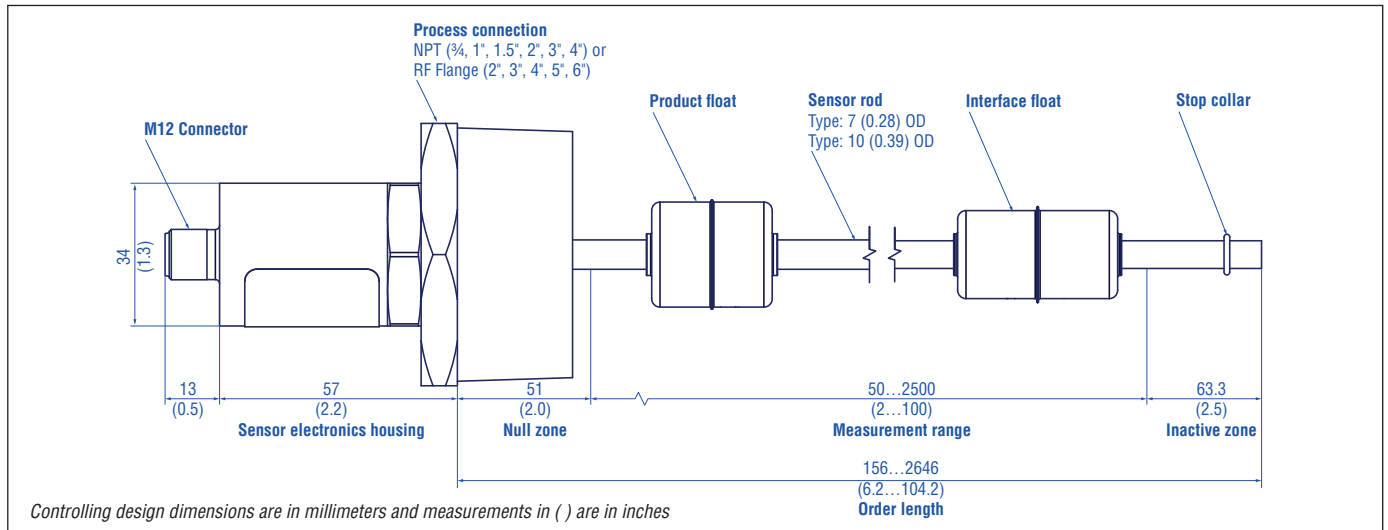
### APPLICATIONS

- Hydraulic Reservoir
- Industrial Printers
- Firefighting Airplanes
- Waste Management
- Generators
- Process Tanks
- Skids

## TECHNICAL DATA

Level Output	
Voltage	0...10 VDC or 10...0 VDC, 0...10 VDC and 10...0 VDC (controller input resistance $R_L > 5 \text{ k}\Omega$ )
Current	4...20 mA or 20...4 mA (minimum/maximum load: 0 / 500 $\Omega$ )
SSI (Synchronous Serial Interface)	Binary or Gray, 24 or 25 bit
CANbus	CANopen: CIA standard DS 301 V3.0/encoder profile DS 406 V3.1, CAN System ISO-11898
IO-Link	V1.1, 32 bit signed, COM3 (230.4 kBaud)
Measured value	Product Level and/or Interface Level
Measurement parameters	
Resolution	0.1 mm
Inherent accuracy	$\pm 0.5 \text{ mm}$
Temperature output	
Measured Variable	Single point temperature
Accuracy	Class A RTD
Output	PT100 RTD
Operating conditions	
Operating temperature	$-40...+75 \text{ }^\circ\text{C}$ ( $-40...+167 \text{ }^\circ\text{F}$ )
Design/Material	
Sensor electronics housing/flange	Stainless steel 1.4305 (AISI 303); option: Stainless steel 1.4404 (AISI 316L)
Sensor rod	7 mm (0.28 in.) rod $\varnothing$ : Stainless steel 1.4301 (AISI 304) 10 mm (0.39 in.) rod $\varnothing$ : Stainless steel 1.4404 (AISI 316L)
Stroke length	156...2646 mm (6.2...104.2 in.)
Operating pressure	7 mm (0.28 in.) rod $\varnothing$ : 300 bar (4351 psi), 450 bar (6527 psi) peak 10 mm (0.39 in.) rod $\varnothing$ : 350 bar (5076 psi), 530 bar (7687 psi) peak

## TECHNICAL DRAWING



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