



Level sensors  
TDR-sensor, LFT

LFT0300-01A1A10



**Model Name** > LFT0300-01A1A10

**Part No.** > 1043594



Product may differ  
from illustration

#### At a glance

- Time-of-flight measurement technology
- Up to 4 switching outputs, combination of analog and digital outputs possible
- Small deadband, ideal for small containers
- Simple, single-button teach
- Flexible probe length up to 2,000 mm
- No re-calibration necessary when fluid properties change
- Measurement independent of installation conditions and tank material
- Filter available for dirty and contaminated fluids

#### Your benefits

- High resolution, accuracy, and repeatability
- Reliable measurement independent of liquid type, installation condition and tank material due to TDR technology
- One device performs the functionality for switching and continuous applications, reducing the number of sensors required
- Reduced installation time and costs through high flexibility
- No re-calibration necessary, saving commissioning time
- A variety of available probe lengths meets the needs of many applications
- No moving parts reduces maintenance costs



#### Features

Medium:	Fluids
Measurement:	Switch, Continuous
Probe length:	300 mm
Measuring range:	30 mm ... 290 mm
Process pressure:	1 bar
Process temperature:	0 °C ... 80 °C
WHG approval:	-
GOST approval:	✓
UL approval:	-

#### Performance

Resolution:	1 mm
Accuracy:	± 3 mm
Repeatability:	< 2 mm
Dielectricity constant:	≥ 1,8

Response time: 200 ms

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**Mechanical data**

Inactive area: Each 10 mm  
Housing material: PBT  
Process connection: G 3/4 A  
Wetted parts: Stainless steel 1.4404/316L

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**Electrical data**

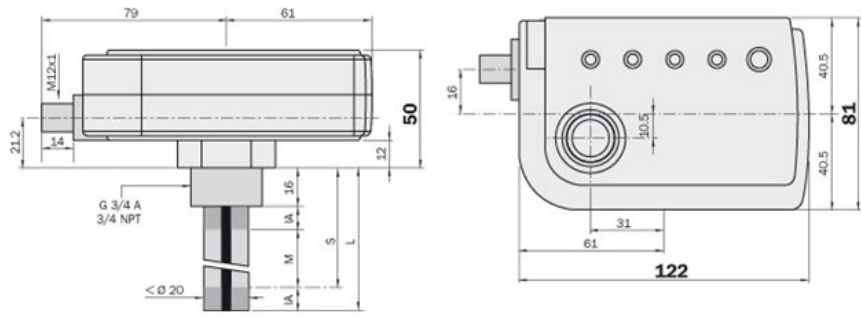
Enclosure rating: IP 67  
Supply voltage: 18 V DC ... 30 V DC  
Ripple:  $\leq 5$  Vpp  
Power consumption:  $\leq 90$  mA at 24 V without output load  
VDE protection class: III  
Initialization time: 4 s  
Output signal: 4 mA ... 20 mA1, PNP, NCC  
Output load:  $< 500$  Ohm  
Upper signal level: 20 mA ... 20.5 mA  
Lower signal level: 3.8 mA ... 4 mA  
Hysteresis: 3 mm  
Signal voltage HIGH:  $V_s - 2$  V  
Signal voltage LOW:  $0 \text{ V} \leq 1 \text{ V}$   
Capacitive load: 100 nF  
Inductive load: 1 H  
Connection type: M12x1, 5-pin

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**Ambient data**

Ambient operating temperature:  $-10 \text{ }^\circ\text{C} \dots 60 \text{ }^\circ\text{C}$   
Ambient storage temperature:  $-40 \text{ }^\circ\text{C} \dots 80 \text{ }^\circ\text{C}$

**Dimensional drawing**



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