ONLINE DATA SHEET
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Level sensors
TDR level sensor, LFT

LFT1600-01A1A50

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Model Name > LFT1600-01A1A50
Part No. > 1045922

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:	1,600 mm
Measuring range:	30 mm ... 1,590 mm
Process pressure:	≤ 1 bar
Process temperature:	0 °C ... 80 °C
WHG approval:	-
GOST approval:	✓
UL approval:	-

Performance

Resolution:	≤ 1 mm
Accuracy of sensor element:	± 3 mm
Repeatability:	2
Dielectricity constant:	1.8

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Response time:	200 ms

Mechanical data

Inactive area:	Each 10 mm
Housing material:	PBT
Process connection:	G 3/4 A
Wetted parts:	Stainless steel 316L／301, PBT, PTFE

Electrical data

Temperature drift:	± 0.05 mm/K
Enclosure rating:	IP 67
Supply voltage:	18 V DC ... 30 V DC
Ripple:	≤ 5 Vpp
Power consumption:	≤ 90 mA at 24 V without output load
Protection class:	III
Initialization time:	≤ 4 s
Output signal:	4 mA ... 20 mA, 1x PNP, normally closed, hysteresis adjustable
Output load:	< 500 Ω
Upper signal level:	20 ... 20.5
Lower signal level:	3.8 ... 4
Hysteresis:	3 mm
Signal voltage HIGH:	Vs - 2 V
Signal voltage LOW:	0 V ≤ 1 V
Capacitive load:	< 100 nF
Inductive load:	≤ 1 H
Connection type:	M12x1, 5-pin

Ambient data

Ambient operating temperature:	-10 °C ... 60 °C
Ambient storage temperature:	-40 °C ... 80 °C

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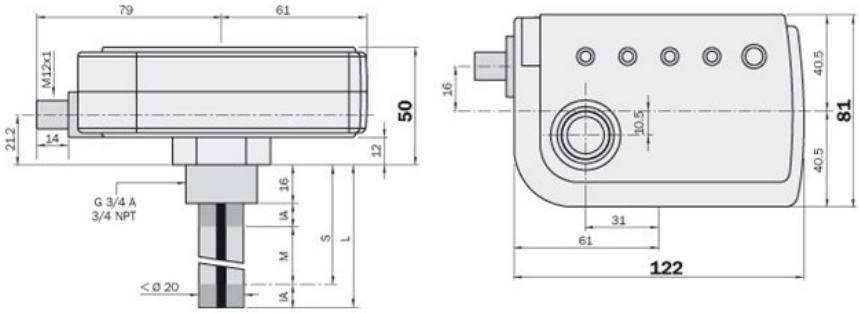
Dimensional drawing



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