



Level sensors  
TDR level sensor

LFT0800-01A1A50



**Model Name** > [LFT0800-01A1A50](#)  
**Part No.** > [1045914](#)



*Illustration may differ*

**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

**The product has been discontinued. Please follow the "replacement product" link for information about alternative products.**



**Features**

Medium:	Fluids
Measurement:	Switch, Continuous
Probe length:	800 mm
Measurement range:	30 mm ... 790 mm
Process pressure:	$\geq \leq 1$ bar
Process temperature:	0 °C ... +80 °C
WHG approval:	-
GOST approval:	✓
UL approval:	-

**Performance**

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Resolution:	≤ 1 mm
Accuracy of sensor element:	± 3 mm
Repeatability:	≤ 2 mm
Dielectricity constant:	1.8
Response time:	200 ms

**Mechanical data**

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Inactive area:	Each 10 mm
Housing material:	PBT
Process connection:	G ¼ A
Wetted parts:	Stainless steel 316L/301, PBT, PTFE

**Electrical data**

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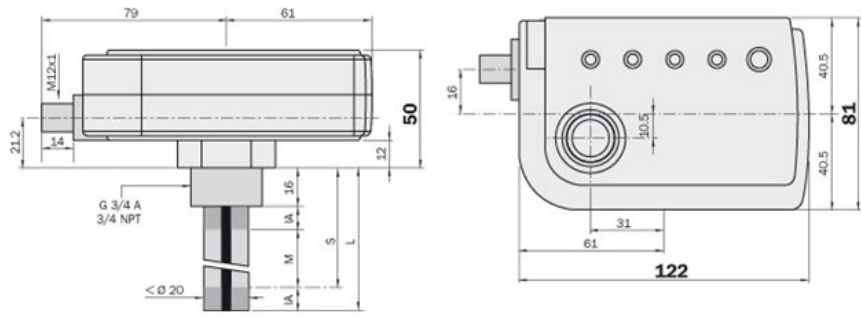
Temperature drift:	± 0.05 mm/K
Enclosure rating:	IP 67
Supply voltage:	18 V DC ... 30 V DC
Ripple:	≤ 5 Vpp
Power consumption:	≤ 90 mA at 24 V DC without output load
Protection class:	III
Initialization time:	≤ 4 s
Output signal:	1 x PNP + 4 mA ... 20 mA, 2 x PNP + 4 mA ... 20 mA, 4x PNP
Output load:	< 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:	Round connector M12 x 1, 5-pin

**Ambient data**

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

# Mazeichnung



**Australia**

Phone +61 3 9457 0600  
1800 33 48 02 – tollfree  
E-Mail sales@sick.com.au

**Belgium/Luxembourg**

Phone +32 (0)2 466 55 66  
E-Mail info@sick.be

**Brasil**

Phone +55 11 3215-4900  
E-Mail marketing@sick.com.br

**Canada**

Phone +1 905 771 14 44  
E-Mail information@sick.com

**Česká republika**

Phone +420 2 57 91 18 50  
E-Mail sick@sick.cz

**China**

Phone +86 4000 121 000  
E-Mail info.china@sick.net.cn  
Phone +852-2153 6300  
E-Mail ghk@sick.com.hk

**Danmark**

Phone +45 45 82 64 00  
E-Mail sick@sick.dk

**Deutschland**

Phone +49 211 5301-301  
E-Mail info@sick.de

**España**

Phone +34 93 480 31 00  
E-Mail info@sick.es

**France**

Phone +33 1 64 62 35 00  
E-Mail info@sick.fr

**Great Britain**

Phone +44 (0)1727 831121  
E-Mail info@sick.co.uk

**India**

Phone +91-22-4033 8333  
E-Mail info@sick-india.com

**Israel**

Phone +972-4-6881000  
E-Mail info@sick-sensors.com

**Italia**

Phone +39 02 27 43 41  
E-Mail info@sick.it

**Japan**

Phone +81 (0)3 5309 2112  
E-Mail support@sick.jp

**Magyarország**

Phone +36 1 371 2680  
E-Mail office@sick.hu

**Nederland**

Phone +31 (0)30 229 25 44  
E-Mail info@sick.nl

**Norge**

Phone +47 67 81 50 00  
E-Mail sick@sick.no

**Österreich**

Phone +43 (0)22 36 62 28 8-0  
E-Mail office@sick.at

**Polska**

Phone +48 22 837 40 50  
E-Mail info@sick.pl

**România**

Phone +40 356 171 120  
E-Mail office@sick.ro

**Russia**

Phone +7-495-775-05-30  
E-Mail info@sick.ru

**Schweiz**

Phone +41 41 619 29 39  
E-Mail contact@sick.ch

**Singapore**

Phone +65 6744 3732  
E-Mail sales.gsg@sick.com

**Slovenija**

Phone +386 (0)1-47 69 990  
E-Mail office@sick.si

**South Africa**

Phone +27 11 472 3733  
E-Mail info@sickautomation.co.za

**South Korea**

Phone +82 2 786 6321/4  
E-Mail info@sickkorea.net

**Suomi**

Phone +358-9-25 15 800  
E-Mail sick@sick.fi

**Sverige**

Phone +46 10 110 10 00  
E-Mail info@sick.se

**Taiwan**

Phone +886 2 2375-6288  
E-Mail sales@sick.com.tw

**Türkiye**

Phone +90 (216) 528 50 00  
E-Mail info@sick.com.tr

**United Arab Emirates**

Phone +971 (0) 4 88 65 878  
E-Mail info@sick.ae

**USA/México**

Phone +1(952) 941-6780  
1 (800) 325-7425 – tollfree  
E-Mail info@sickusa.com

More representatives and agencies  
at [www.sick.com](http://www.sick.com)