ONLINE DATA SHEET
www.mysick.com

Level sensors
TDR level sensor, LFT

LFT1700-01A1A50

SICK
Sensor Intelligence.

SICK
Sensor Intelligence.

Level sensors
TDR level sensor, LFT

Model Name > LFT1700-01A1A50
Part No. > 1045923

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:	1,700 mm
Measuring range:	30 mm ... 1,690 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

© SICK AG. Subject to change without notice.

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

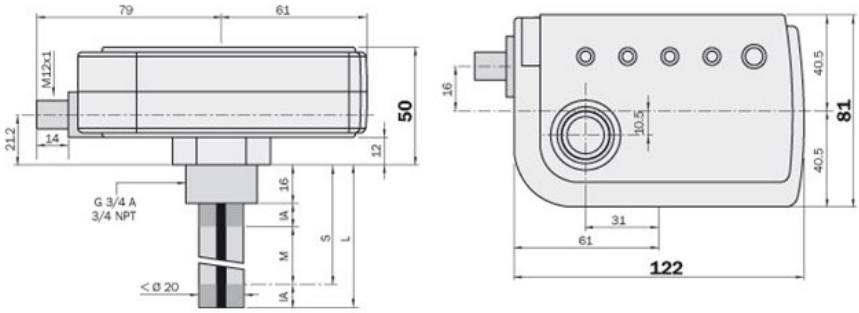
Temperature drift:	± 0.05 mm/K
Enclosure rating:	IP 67
Supply voltage:	18 V DC ... 30 V DC
Ripple:	≤ 5 Vpp
Power consumption:	≤ 90 mA at 24 V without output load
Protection class:	III
Initialization time:	≤ 4 s
Output signal:	4 mA ... 20 mA, 1x PNP, normally closed, hysteresis adjustable
Output load: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

© SICK AG. Subject to change without notice.

Dimensional drawing



© SICK AG. Subject to change without notice.

· USmod 4c int40

Australia
Phone +61 3 9457 0600
1800 334 802 – 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 sac@sick.com.br

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

Ceská 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 kundenservice@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 +972-4-6801000
E-Mail info@sick-sensors.com

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

Japan
Phone +81 (0)3 3358 1341
E-Mail support@sick.jp

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

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

Norge
Phone +47 67 81 50 00
E-Mail austefjord@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 admin@sicksgp.com.sg

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 8865 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**

SICK
Sensor Intelligence.