

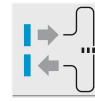


fibers
LL3, Fibers, through-beam system

LL3-TR02



Model Name > [LL3-TR02](#)
Part No. > [5308053](#)



At a glance

- Quick and easy mounting
- Models with hexagonal flange for trouble-free mounting with only one nut
- Optional tip adapter for a larger detection distance and small objects

Your benefits

- Very large selection of fiber-optic cables with plastic and glass fibers, giving users more application flexibility
- Resistant to damage caused by mechanical and chemical stress, as well as high temperatures
- Standard and customer-specific types
- Simple installation saves time
- For detection of objects, surfaces, leading edges, and fluid levels

Features

For fiber-optic sensor:	WLL160(T), WLL170-2/WLL170T-2, WLL180T, WLL190T-2
Device type:	Fibers
Jacket material:	PE
Core material:	PMMA
Sleeve material:	Stainless steel ¹⁾
Diameter, connection:	1 mm
Mounting sleeve dimension:	M3
Bend radius, fibre-optic cable:	4 mm
Heat resistance:	70 °C
Ambient temperature operation:	-40 °C ... 70 °C
Minimal object diameter:	0.1 mm ²⁾
Core structure:	4 x Ø 0.25 mm
Fiber-optic cable cuttable ³⁾ :	✓
Thread sleeve:	✓
Sleeve:	-
90° offset:	-
Flat housing:	-
High flexible:	✓
Long end sleeve:	-
Array:	-
High temperature:	-
Oil/chemical resistant:	-
Lcd/clear material/semiconductor:	-
Vacuum:	-

Robotics:	✓
Retro-reflective:	-
Liquid level:	-
Special features:	Flexible fiber-optic cable, extra-small end sleeve
Category fiber-optic cables:	Flexible fiber-optic cable, Threaded sleeve
Fiber length:	2,000 mm

1) Stainless steel 2) Minimum detectable object was determined at optimal measuring distance and optimal setting 3) FC fiber optic cable cutter included in delivery

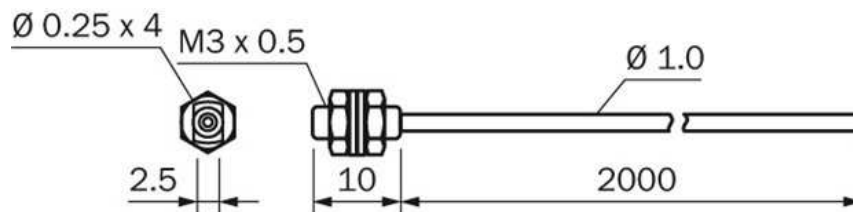
Sensing range with WLL180T

Operating mode 16 μ s:	60 mm
Operating mode 70 μ s:	175 mm
Operating mode 250 μ s:	330 mm
Operating mode 2 ms:	750 mm
Operating mode 8 ms:	1,100 mm

Sensing range with WLL170-2

Redlight 250 μ s:	115 mm
Greenlight 250 μ s:	23 mm
Highspeed 50 μ s:	38 mm

Dimensional drawing



All dimensions in mm

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