

LL3-DK43

LL3

**FIBERS** 





### Ordering information

Туре	Part no.
LL3-DK43	5313030

Included in delivery: BF-WLL160-10 (1), FC (1)
Other models and accessories → www.sick.com/LL3

#### Detailed technical data

#### **Features**

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Device type	Fibers
Functional principle	Proximity system
For fiber-optic sensor	GLL170(T), WLL180, WLL80
Fiber length	2,000 mm
Fiber material	Polymethylmethacrylat (PMMA)
Jacket material	Polyethylen (PE)
Fiber head material	Stainless steel
Outer diameter, fiber-optic cable connection	1 mm
Fiber-optic cable cuttable	✓
Smooth sleeve diameter (greatest diameter)	4 mm
Fiber-optic head design	Smooth sleeve, Long end sleeve
Fiber arrangement	Monofiber
Core structure	2 x Ø 0,5 mm <sup>1)</sup> Monofiber
Angle of dispersion < 60°	No
Compatibility with infrared light (1,450 nm)	No
Diameter/thread size from 2 mm taper	≥ 1.5 mm
Length of taper	≥ 20 mm
Diameter of taper	≥ 1.5 mm
Highly flexible/elastic fibers (bend radius 1–4 mm)	No
Adapter end sleeves required	Yes
Angle of dispersion	60°
Integrated lens	No
Minimal object diameter	0.015 mm <sup>2)</sup>
Included with delivery	Adapter sleeves, BF-WLL160-10 (1.0 mm) adapter sleeves, FC fiber cutter (5304141)
Compatibility tip adapters	No
Special features	Ideal for small, insufficient objects. Compact head, thin tip

 $<sup>^{1)}</sup>$  C = Coaxial, S = Sender, E = Receiver.

 $<sup>^{2)}</sup>$  Minimum detectable object was determined at optimum measuring distance and optimum setting.

### Mechanics/electronics

Bend radius, fibre-optic cable	15 mm
Ambient operating temperature	-40 °C +70 °C

#### Classifications

ECLASS 5.0	27270905
ECLASS 5.1.4	27270905
ECLASS 6.0	27270905
ECLASS 6.2	27270905
ECLASS 7.0	27270905
ECLASS 8.0	27270905
ECLASS 8.1	27270905
ECLASS 9.0	27270905
ECLASS 10.0	27270905
ECLASS 11.0	27270905
ECLASS 12.0	27270905
ETIM 5.0	EC002651
<b>ETIM 6.0</b>	EC002651
ETIM 7.0	EC002651
ETIM 8.0	EC002651
UNSPSC 16.0901	39121528

# Sensing ranges with WLL80

Operating mode 16 µs	30 mm
Operating mode 70 µs	100 mm
Operating mode 250 µs	160 mm
Operating mode 500 µs	195 mm
Operating mode 1 ms	230 mm
Operating mode 2 ms	330 mm
Operating mode 8 ms	490 mm

### Sensing ranges with WLL180T

Operating mode 16 μs	10 mm
Operating mode 70 μs	28 mm
Operating mode 250 µs	45 mm
Operating mode 2 ms	93 mm
Operating mode 8 ms	170 mm
Note	Sensing ranges related to fiber-optic sensors with type of light: visible red light

### Sensing ranges with GLL170

Operating mode 250 µs	50 mm
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# Sensing ranges with GLL170T

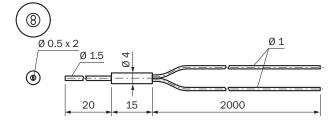
Operating mode 50 µs	40 mm
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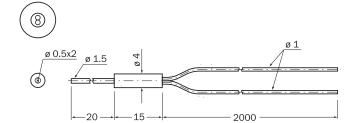
Operating mode 250 µs

80 mm

### Dimensional drawing (Dimensions in mm (inch))

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# SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is "Sensor Intelligence."

# **WORLDWIDE PRESENCE:**

Contacts and other locations -www.sick.com

