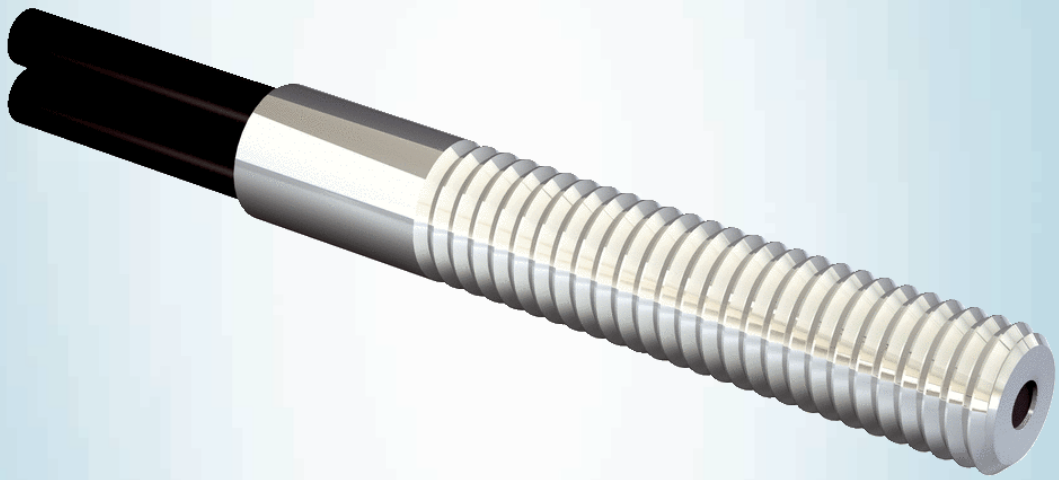
Product data sheet

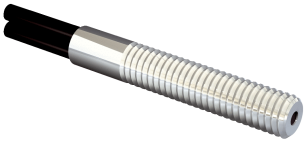


LL3-DT01

LL3

FIBERS

SICK
Sensor Intelligence.



Ordering information

Type	Part no.
LL3-DT01	5308076

Other models and accessories → www.sick.com/LL3

Detailed technical data

Features

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	1.3 mm
Fiber-optic cable cuttable	✓
Thread diameter (housing)	M3
Fiber-optic head design	Threaded sleeve
Fiber arrangement	Coaxial arrangement
Core structure	S: Ø 0,5 mm, R: 9 x Ø 0,25 mm [1] Coaxial arrangement
Angle of dispersion < 60°	No
Compatibility with infrared light (1,450 nm)	No
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 [2]
Included with delivery	Mounting, 2 x M3 hexagon nut, 2 x washer, adapter sleeves, BF-WLL160-13 (1.3 mm) adapter sleeves, FC fiber cutter (5304141)
Compatibility tip adapters	Yes
Special features	Coaxial construction for exact switching, suitable for tip adapters

[1] C = Coaxial, S = Sender, E = Receiver.
[2] 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
ETIM 6.0	EC002651
ETIM 7.0	EC002651
ETIM 8.0	EC002651
UNSPSC 16.0901	39121528

Sensing ranges with WLL80

Operating mode 16 µs	45 mm
Operating mode 70 µs	170 mm
Operating mode 250 µs	265 mm
Operating mode 500 µs	320 mm
Operating mode 1 ms	380 mm
Operating mode 2 ms	505 mm
Operating mode 8 ms	710 mm

Sensing ranges with WLL180T

Operating mode 16 µs	40 mm
Operating mode 70 µs	130 mm
Operating mode 250 µs	200 mm
Operating mode 2 ms	350 mm
Operating mode 8 ms	600 mm
Note	Sensing ranges related to fiber-optic sensors with type of light: visible red light

Sensing ranges with GLL170

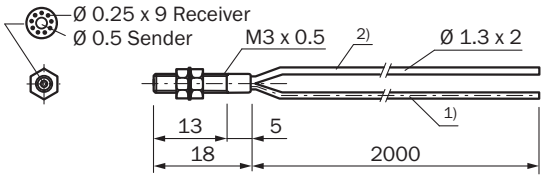
Operating mode 250 µs	70 mm

Sensing ranges with GLL170T

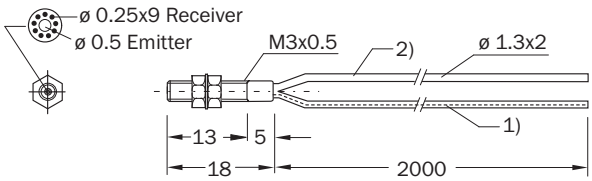
Operating mode 50 µs	60 mm
Operating mode 250 µs	110 mm

Dimensional drawing (Dimensions in mm (inch))

LL3-DT01



1) Sender
2) Receiver



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

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