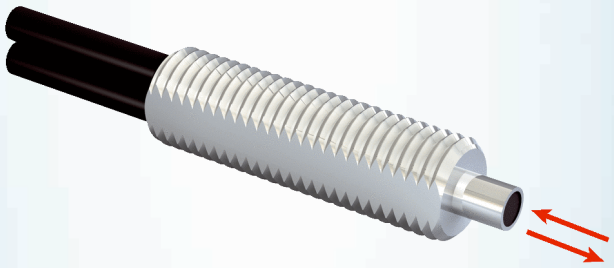
Online data sheet

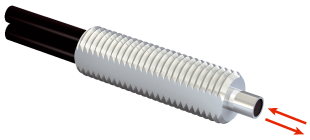


LL3-DB03

LL3

FIBER-OPTIC SENSORS AND FIBERS

SICK
Sensor Intelligence.



Ordering information

Type	Part no.
LL3-DB03	5313021

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

Detailed technical data

Features

Device type	Fibers
Detection principle	Proximity system
For fiber-optic sensor	GLL170(T), WLL180T, WLL24 Ex
Fiber length	2 m
Fiber material	Polymethylmethacrylat (PMMA)
Jacket material	Polyethylen (PE)
Fiber head material	Stainless steel [1]
Outer diameter, fiber-optic cable connection	2.2 mm
Fiber-optic cable cuttable	✓ [2]
Thread size	M6
Fiber-optic head design	Threaded sleeve
Fiber arrangement	Coaxial arrangement
Core structure	S: Ø 1 mm, R: 16 x Ø 0,25 mm [3] Coaxial arrangement
Bend radius, fibre-optic cable	25 mm
Angle of dispersion < 60°	No
Compatibility with infrared light (1,450 nm)	No
Ambient operating temperature	–40 °C ... +70 °C
Diameter/thread size from 2 mm taper	≥ 2.5 mm
Length of taper	≥ 3 mm
Highly flexible/elastic fibers (bend radius 1–4 mm)	No
Adapter end sleeves required	No
Angle of dispersion	60°
Integrated lens	No
Minimal object diameter	0.015 mm [4]
Special features	Coaxial construction for exact switching
Included with delivery	Mounting, 2 x M6 hexagon nut, 2 x washer, FC fiber cutter (5304141)
Compatibility tip adapters	No

[1] Stainless steel.
[2] FC fiber optic cable cutter included in delivery.
[3] C = Coaxial, S = Sender, E = Receiver.
[4] Minimum detectable object was determined at optimum measuring distance and optimum setting.

Classifications

ECl@ss 5.0	27270905
ECl@ss 5.1.4	27270905
ECl@ss 6.0	27270905
ECl@ss 6.2	27270905
ECl@ss 7.0	27270905
ECl@ss 8.0	27270905
ECl@ss 8.1	27270905
ECl@ss 9.0	27270905
ETIM 5.0	EC002651
ETIM 6.0	EC002651
UNSPSC 16.0901	39121528

Sensing ranges with WLL180T

Operating mode 16 µs	90 mm
Operating mode 70 µs	300 mm
Operating mode 250 µs	500 mm
Operating mode 2 ms	900 mm
Operating mode 8 ms	1,350 mm

Sensing ranges with GLL170

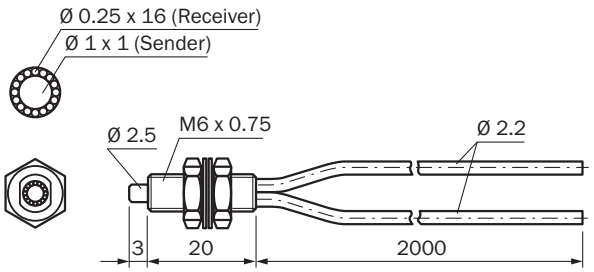
Operating mode 250 µs	160 mm

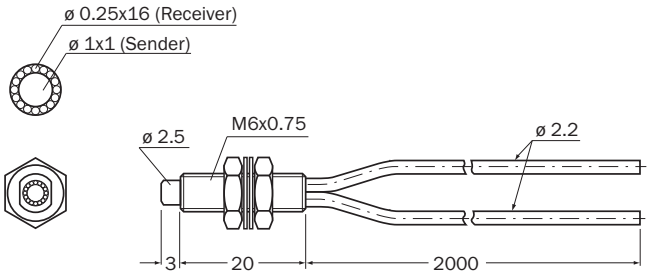
Sensing ranges with GLL170T

Operating mode 50 µs	160 mm
Operating mode 250 µs	300 mm

Dimensional drawing (Dimensions in mm (inch))

LL3-DB03




ø 0.25x16 (Receiver)
ø 1x1 (Sender)
ø 2.5
M6x0.75
ø 2.2
3
20
2000

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.”

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Contacts and other locations –www.sick.com