

LL3-DB01-10

LL3

**FIBERS** 

**SICK**Sensor Intelligence.



### Ordering information

Туре	Part no.
LL3-DB01-10	5308075

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

### Detailed technical data

### **Features**

Device type	Fibers, fiber suitable for WLL260
Functional principle	Proximity system
For fiber-optic sensor	GLL170(T), WLL180, WLL24 Ex, WLL80
Fiber length	10,000 mm
Fiber material	Polymethylmethacrylat (PMMA)
Jacket material	Polyethylen (PE)
Fiber head material	Stainless steel
Outer diameter, fiber-optic cable connection	2.2 mm
Fiber-optic cable cuttable	✓
Thread diameter (housing)	M6
Fiber-optic head design	Threaded sleeve
Fiber arrangement	Coaxial arrangement
Core structure	S: Ø 1 mm, R: 16 x Ø 0,25 mm $^{1)}$ Coaxial arrangement
Angle of dispersion < 60°	No
Compatibility with infrared light (1,450 nm)	No
Diameter/thread size from 2 mm taper	≥ 2.8 mm
Length of taper	≥ 5 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 <sup>2)</sup>
Included with delivery	Mounting, 2 x M6 hexagon nut, 2 x washer, FC fiber cutter (5304141)
Compatibility tip adapters	No
Special features	Coaxial construction for exact switching. Standard, fiber length 10 m

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

### Mechanics/electronics

Bend radius, fibre-optic cable	25 mm
Ambient operating temperature	-40 °C +70 °C

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

### 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	65 mm
Operating mode 70 μs	200 mm
Operating mode 250 µs	285 mm
Operating mode 500 µs	335 mm
Operating mode 1 ms	370 mm
Operating mode 2 ms	460 mm
Operating mode 8 ms	700 mm

# Sensing ranges with WLL180T

Operating mode 16 μs	50 mm
Operating mode 70 µs	140 mm
Operating mode 250 µs	250 mm
Operating mode 2 ms	500 mm
Operating mode 8 ms	750 mm
Note	Sensing ranges related to fiber-optic sensors with type of light: visible red light

### Sensing ranges with GLL170

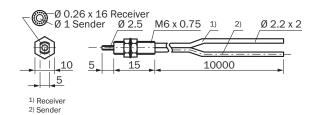
Operating mode 250 µs	100 mm

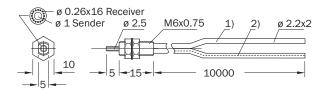
# Sensing ranges with GLL170T

Operating mode 50 µs	70 mm
Operating mode 250 µs	150 mm

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

### LL3-DB01-10





<sup>1)</sup> Sender

#### Recommended accessories

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

	Brief description	Туре	Part no.
Device protec	tion (mechanical)		
	Metal protection hose for LL3-Fibers with M6 threaded head; length 1000 mm, stainless steel, 1 pieces	BEF-LL3M61000	5331291
	Metal protection hose for LL3-Fibers with M6 threaded head; length 500 mm, stainless steel, 1 pieces	BEF-LL3M6500	5331290

<sup>2)</sup> 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

