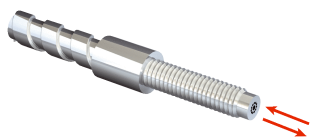


# LL3-DJ01

LL3

FIBERS

**SICK**  
Sensor Intelligence.



## Ordering information

Type	Part no.
LL3-DJ01	5325989

Other models and accessories → [www.sick.com/LL3](http://www.sick.com/LL3)

## Detailed technical data

## Features

<b>Device type</b>	Fibers
<b>Functional principle</b>	Proximity system
<b>For fiber-optic sensor</b>	GLL170(T), WLL180T, WLL24 Ex, WLL80
<b>Fiber length</b>	1,000 mm
<b>Fiber material</b>	Polymethylmethacrylat (PMMA)
<b>Jacket material</b>	Stainless steel
<b>Fiber head material</b>	Stainless steel
<b>Outer diameter, fiber-optic cable connection</b>	2.2 mm
<b>Fiber-optic cable cuttable</b>	✓
<b>Thread diameter (housing)</b>	M3
<b>Fiber-optic head design</b>	Threaded sleeve
<b>Fiber arrangement</b>	Coaxial arrangement
<b>Core structure</b>	S: Ø 0,5 mm, R: 9 x Ø 0,25 mm Coaxial arrangement
<b>Angle of dispersion &lt; 60°</b>	No
<b>Compatibility with infrared light (1,450 nm)</b>	No
<b>Highly flexible/elastic fibers (bend radius 1–4 mm)</b>	No
<b>Adapter end sleeves required</b>	Yes
<b>Angle of dispersion</b>	60°
<b>Integrated lens</b>	No
<b>Minimal object diameter</b>	0.02 mm <sup>1)</sup>
<b>Included with delivery</b>	Mounting, 2 x M3 hexagon nut, 1 x washer, adapter sleeves, 1 x BF-WLL160-10 (1.0 mm) adapter sleeve, 1 x BF-WLL160-13 (1.3 mm) adapter sleeve, FC fiber cutter (5304141)
<b>Compatibility tip adapters</b>	Yes

<sup>1)</sup> Minimum detectable object was determined at optimum measuring distance and optimum setting.

## Mechanics/electronics

<b>Bend radius, fibre-optic cable</b>	10 mm
<b>Ambient operating temperature</b>	-40 °C ... +60 °C

## Classifications

<b>ECl@ss 5.0</b>	27270905
<b>ECl@ss 5.1.4</b>	27270905

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

Sensing ranges with WLL80

<b>Operating mode 16 <math>\mu</math>s</b>	25 mm
<b>Operating mode 70 <math>\mu</math>s</b>	100 mm
<b>Operating mode 250 <math>\mu</math>s</b>	160 mm
<b>Operating mode 500 <math>\mu</math>s</b>	200 mm
<b>Operating mode 1 ms</b>	225 mm
<b>Operating mode 2 ms</b>	310 mm
<b>Operating mode 8 ms</b>	420 mm

Sensing ranges with WLL180T

<b>Operating mode 16 <math>\mu</math>s</b>	14 mm
<b>Operating mode 70 <math>\mu</math>s</b>	49 mm
<b>Operating mode 250 <math>\mu</math>s</b>	99 mm
<b>Operating mode 2 ms</b>	190 mm
<b>Operating mode 8 ms</b>	210 mm
<b>Note</b>	Sensing ranges related to fiber-optic sensors with type of light: visible red light

Sensing ranges with GLL170

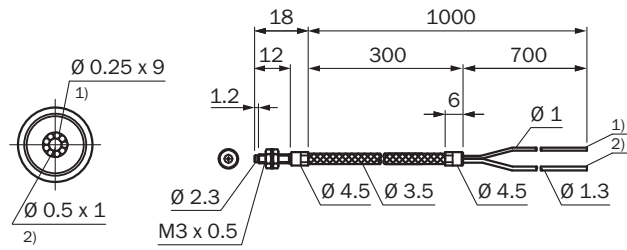
<b>Operating mode 250 <math>\mu</math>s</b>	70 mm
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Sensing ranges with GLL170T

<b>Operating mode 50 <math>\mu</math>s</b>	30 mm
<b>Operating mode 250 <math>\mu</math>s</b>	70 mm

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

LL3-DJ01



1) Receiver  
2) Sender

## 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](http://www.sick.com)