

LL3-DM01

LL3

FIBERS





Ordering information

| Туре | Part no. |
|----------|----------|
| LL3-DM01 | 5308071 |

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 |
| Sensing range max. | 1,120 mm (Sensing range WLL80 at 8 ms) |
| 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) | M4 |
| Fiber-optic head design | Threaded sleeve |
| Fiber arrangement | Monofiber |
| Core structure | 2 x Ø 1,0 mm ¹⁾ Monofiber |
| 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 | 0.0015 mm ²⁾ |
| Included with delivery | Mounting, 2 x M4 hexagon nut, 2 x washer, adapter sleeves, BF-WLL160-13 (1.3 mm) adapter sleeves, FC fiber cutter (5304141) |
| Compatibility tip adapters | No |
| Special features | Standard, compact head and end sleeve, large sensing range |
| | |

 $^{^{1)}}$ C = Coaxial, S = Sender, E = Receiver.

Mechanics/electronics

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

 $^{^{2)}}$ 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 | 100 mm |
|-----------------------|----------|
| Operating mode 70 µs | 285 mm |
| Operating mode 250 µs | 465 mm |
| Operating mode 500 µs | 545 mm |
| Operating mode 1 ms | 600 mm |
| Operating mode 2 ms | 770 mm |
| Operating mode 8 ms | 1,120 mm |

Sensing ranges with WLL180T

| Operating mode 16 μs | 75 mm |
|-----------------------|---|
| Operating mode 70 µs | 255 mm |
| Operating mode 250 µs | 420 mm |
| Operating mode 2 ms | 800 mm |
| Operating mode 8 ms | 1,300 mm |
| Note | Sensing ranges related to fiber-optic sensors with type of light: visible red light |

Sensing ranges with GLL170

| Operating mode 250 µs | 170 mm |
|-----------------------|--------|

Sensing ranges with GLL170T

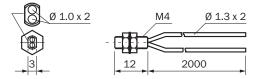
| Operating mode 50 µs | 130 mm |
|-----------------------|--------|
| Operating mode 250 µs | 240 mm |

LL3-DM01 | LL3

FIBERS

Dimensional drawing (Dimensions in mm (inch))

LL3-DM01



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

