



# LL3-TH08S01

LL3

FIBERS

**SICK**  
Sensor Intelligence.



## Ordering information

| Type        | Part no. |
|-------------|----------|
| LL3-TH08S01 | 5337056  |

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

## Detailed technical data

### Features

|                                                            |                                                             |
|------------------------------------------------------------|-------------------------------------------------------------|
| <b>Device type</b>                                         | Fibers                                                      |
| <b>Detection principle</b>                                 | Through-beam system (consisting of a sender and a receiver) |
| <b>Fiber length</b>                                        | 195 mm, 545 mm                                              |
| <b>Fiber material</b>                                      | Glass                                                       |
| <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>Thread diameter (housing)</b>                           | M4                                                          |
| <b>Fiber arrangement</b>                                   | Monofiber                                                   |
| <b>Core structure</b>                                      | Ø 1,2 mm Monofiber                                          |
| <b>Bend radius, fibre-optic cable</b>                      | 25 mm                                                       |
| <b>Angle of dispersion &lt; 60°</b>                        | No                                                          |
| <b>Compatibility with infrared light (1,450 nm)</b>        | Yes                                                         |
| <b>Ambient operating temperature</b>                       | -30 °C ... +350 °C                                          |
| <b>Diameter/thread size from 2 mm taper</b>                | ≥ 2.6 mm                                                    |
| <b>Length of taper</b>                                     | ≥ 3 mm                                                      |
| <b>Highly flexible/elastic fibers (bend radius 1–4 mm)</b> | No                                                          |
| <b>Adapter end sleeves required</b>                        | No                                                          |
| <b>Angle of dispersion</b>                                 | 60°                                                         |
| <b>Integrated lens</b>                                     | No                                                          |
| <b>Minimal object diameter</b>                             | 0.04 mm <sup>1)</sup>                                       |
| <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> | 25 mm              |
| <b>Ambient operating temperature</b>  | -30 °C ... +350 °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>ETIM 5.0</b>       | EC002651 |
| <b>ETIM 6.0</b>       | EC002651 |
| <b>ETIM 7.0</b>       | EC002651 |
| <b>UNSPSC 16.0901</b> | 39121528 |

## Sensing ranges with WLL180T

|                                             |          |
|---------------------------------------------|----------|
| <b>Operating mode 16 <math>\mu</math>s</b>  | 150 mm   |
| <b>Operating mode 70 <math>\mu</math>s</b>  | 480 mm   |
| <b>Operating mode 250 <math>\mu</math>s</b> | 790 mm   |
| <b>Operating mode 2 ms</b>                  | 1,500 mm |
| <b>Operating mode 8 ms</b>                  | 1,600 mm |

## Sensing ranges with GLL170

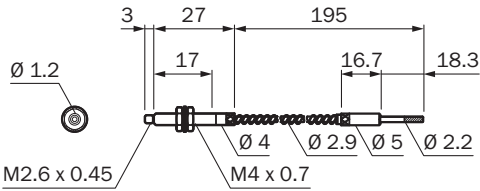
|                                             |        |
|---------------------------------------------|--------|
| <b>Operating mode 250 <math>\mu</math>s</b> | 560 mm |
|---------------------------------------------|--------|

## Sensing ranges with GLL170T

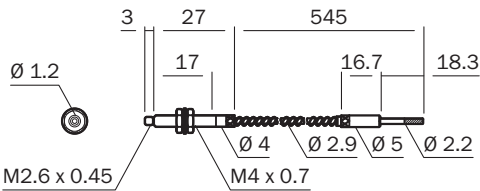
|                                             |        |
|---------------------------------------------|--------|
| <b>Operating mode 50 <math>\mu</math>s</b>  | 470 mm |
| <b>Operating mode 250 <math>\mu</math>s</b> | 680 mm |

Dimensional drawing (Dimensions in mm (inch))

**1 x 195 mm**



**1 x 545 mm**



## 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)