



## fibers LL3, Fibers, through-beam system

LL3-TB01



**Model Name** > LL3-TB01  
**Part No.** > 5308050



#### At a glance

- Quick and easy mounting
- Models with hexagonal flange for trouble-free mounting with only one nut
- Optional tip adapter for a larger detection distance and small objects

#### Your benefits

- Very large selection of fiber-optic cables with plastic and glass fibers, giving users more application flexibility
- Resistant to damage caused by mechanical and chemical stress, as well as high temperatures
- Standard and customer-specific types
- Simple installation saves time
- For detection of objects, surfaces, leading edges, and fluid levels

#### Features

|                                            |                                                   |
|--------------------------------------------|---------------------------------------------------|
| For fiber-optic sensor:                    | WLL160(T), WLL170-2/WLL170T-2, WLL180T, WLL190T-2 |
| Device type:                               | Fibers                                            |
| Jacket material:                           | PE                                                |
| Core material:                             | PMMA                                              |
| Sleeve material:                           | Stainless steel <sup>1)</sup>                     |
| Diameter, connection:                      | 2.2 mm                                            |
| Mounting sleeve dimension:                 | M4                                                |
| Bend radius, fibre-optic cable:            | 30 mm                                             |
| Heat resistance:                           | 70 °C                                             |
| Ambient operating temperature:             | -40 °C ... 70 °C                                  |
| Minimal object diameter:                   | 0.5 mm <sup>2)</sup>                              |
| Core structure:                            | Ø 1.5 mm                                          |
| Fiber-optic cable cuttable <sup>3)</sup> : | ✓                                                 |
| Thread sleeve:                             | ✓                                                 |
| Sleeve:                                    | -                                                 |
| Suitable tip adaptor:                      | LL3-TA01, LL3-TA02                                |
| 90° offset:                                | -                                                 |
| Flat housing:                              | -                                                 |
| High flexible:                             | -                                                 |
| Long end sleeve:                           | -                                                 |
| Array:                                     | -                                                 |
| High temperature:                          | -                                                 |
| Oil/chemical resistant:                    | -                                                 |
| Lcd/clear material/semiconductor:          | -                                                 |

|                              |                                                   |
|------------------------------|---------------------------------------------------|
| Vacuum:                      | -                                                 |
| Robotics:                    | -                                                 |
| Retro-reflective:            | -                                                 |
| Liquid level:                | -                                                 |
| Special features:            | Standard, compact end sleeve, large sensing range |
| Category fiber-optic cables: | Threaded sleeve                                   |
| Fiber length:                | 2,000 mm                                          |

<sup>1)</sup> Stainless steel    <sup>2)</sup> Minimum detectable object was determined at optimal measuring distance and optimal setting    <sup>3)</sup> FC fiber optic cable cutter included in delivery

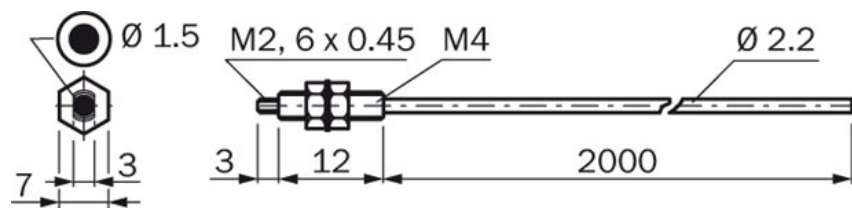
#### Sensing range with WLL180T

|                        |          |
|------------------------|----------|
| Operating mode 16 µs:  | 300 mm   |
| Operating mode 70 µs:  | 950 mm   |
| Operating mode 250 µs: | 1,700 mm |
| Operating mode 2 ms:   | 3,500 mm |
| Operating mode 8 ms:   | 4,000 mm |

#### Sensing range with WLL170-2

|                    |        |
|--------------------|--------|
| Redlight 250 µs:   | 720 mm |
| Greenlight 250 µs: | 280 mm |
| Highspeed 50 µs:   | 315 mm |

#### Dimensional drawing



All dimensions in mm

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