



fibers  
LL3, Fibers, proximity system

LL3-DR06



**Model Name** > [LL3-DR06](#)  
**Part No.** > [5308082](#)



**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:                      | 1 mm  |
| Mounting sleeve dimension:                 | M4  |
| Bend radius, fibre-optic cable:            | 4 mm  |
| Heat resistance:                           | 70 °C   |
| Ambient temperature operation:             | -40 °C ... 70 °C                                  |
| Minimal object diameter:                   | 0.015 mm <sup>2)</sup>                            |
| Core structure:                            | S: 4 x Ø 0,25 mm, E: 4 x Ø 0,25 mm <sup>3)</sup>  |
| Fiber-optic cable cuttable <sup>4)</sup> : | ✓   |
| Thread sleeve:                             | ✓   |
| Sleeve:                                    | -   |
| 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:            | Flexible fiber-optic cable, compact head    |
| Category fiber-optic cables: | Flexible fiber-optic cable, Threaded sleeve |
| Fiber length:                | 2,000 mm                                    |

1) Stainless steel 2) Minimum detectable object was determined at optimal measuring distance and optimal setting 3) C = Coaxial, S = Sender, E = Receiver 4) FC

fiber optic cable cutter included in delivery

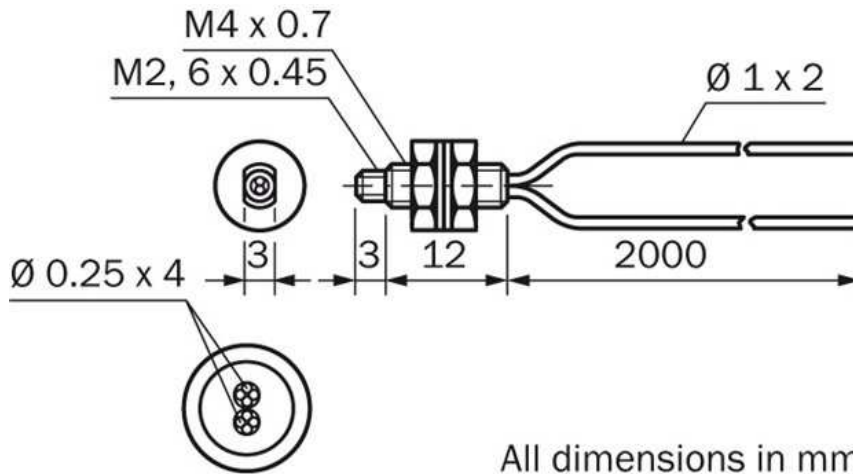
### Sensing range with WLL180T

|                        |        |
|------------------------|--------|
| Operating mode 16 µs:  | 18 mm  |
| Operating mode 70 µs:  | 60 mm  |
| Operating mode 250 µs: | 100 mm |
| Operating mode 2 ms:   | 220 mm |
| Operating mode 8 ms:   | 360 mm |

### Sensing range with WLL170-2

|                    |       |
|--------------------|-------|
| Redlight 250 µs:   | 37 mm |
| Greenlight 250 µs: | 5 mm  |
| Highspeed 50 µs:   | 11 mm |

### Dimensional drawing



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