



# LLTE-A1400111070E4

Fiber-optic cables

**FIBER-OPTIC SENSORS**

**SICK**  
Sensor Intelligence.



Illustration may differ

### Ordering information

| Type               | part no. |
|--------------------|----------|
| LLTE-A1400111070E4 | 2130894  |

**Included in delivery:** LLAC-AB10 (1), LLAC-AB13 (1), LLAC-FC (1)

Other models and accessories → [www.sick.com/Fiber-optic\\_cables](http://www.sick.com/Fiber-optic_cables)

### Detailed technical data

#### Features

|                                          |                                                                                                                                     |
|------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| <b>Device type</b>                       | Fiber-optic cables                                                                                                                  |
| <b>Functional principle</b>              | Proximity system                                                                                                                    |
| <b>Fiber-optic head design</b>           | Threaded sleeve                                                                                                                     |
| <b>Application</b>                       | Standard                                                                                                                            |
| <b>Compatible fiber-optic amplifiers</b> | GLL70, WLL80, WLL180, GLL170(T)                                                                                                     |
| <b>Sensing range max.</b>                | Depending on the fiber optic amplifier used                                                                                         |
| <b>Optical fiber head</b>                |                                                                                                                                     |
| Angle of dispersion                      | 60°                                                                                                                                 |
| Integrated lens                          | No                                                                                                                                  |
| Compatibility tip adapters               | Yes                                                                                                                                 |
| <b>Optical fiber</b>                     |                                                                                                                                     |
| Compatibility with infrared light        | No                                                                                                                                  |
| Optical fiber cable can be shortened     | ✓                                                                                                                                   |
| Adapter end sleeves required             | Yes (1 x LLAC-AB10 / 1 x LLAC-AB13)                                                                                                 |
| <b>Items supplied</b>                    | 1 x fiber cutter (LLAC-FC), M4 mounting set (2 x M4 nut + 2 x M4 washer), 2 x fiber adapter bushing (1 x LLAC-AB10 + 1 x LLAC-AB13) |

#### Mechanics

|                                                  |                  |
|--------------------------------------------------|------------------|
| <b>Optical fiber head</b>                        |                  |
| Light emission                                   | Axial            |
| Thread diameter (housing)                        | M4               |
| <b>Optical fiber</b>                             |                  |
| Fiber length                                     | 7,000 mm         |
| Bending radius                                   | 15 mm            |
| Dynamic flexibility (robotics)                   | No               |
| Outside diameter, optical fiber cable connection | 2.2 mm           |
| Fiber arrangement                                | Coaxial          |
| Core structure                                   | Ø 0,5 mm Coaxial |
| <b>Material</b>                                  |                  |
| Optical fiber head                               | Stainless steel  |
| Sheath                                           | Polyethylen (PE) |

|               |        |      |
|---------------|--------|------|
|               | Fibers | PMMA |
| <b>Weight</b> |        | 31 g |

## Ambient data

|                                      |                   |
|--------------------------------------|-------------------|
| <b>Ambient operating temperature</b> | -40 °C ... +60 °C |
|--------------------------------------|-------------------|

## Classifications

|                       |          |
|-----------------------|----------|
| <b>ECLASS 5.0</b>     | 27270905 |
| <b>ECLASS 5.1.4</b>   | 27270905 |
| <b>ECLASS 6.0</b>     | 27270905 |
| <b>ECLASS 6.2</b>     | 27270905 |
| <b>ECLASS 7.0</b>     | 27270905 |
| <b>ECLASS 8.0</b>     | 27270905 |
| <b>ECLASS 8.1</b>     | 27270905 |
| <b>ECLASS 9.0</b>     | 27270905 |
| <b>ECLASS 10.0</b>    | 27270905 |
| <b>ECLASS 11.0</b>    | 27270905 |
| <b>ECLASS 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 WLL180T

|                              |        |
|------------------------------|--------|
| <b>Operating mode 16 µs</b>  | 19 mm  |
| <b>Operating mode 70 µs</b>  | 53 mm  |
| <b>Operating mode 250 µs</b> | 90 mm  |
| <b>Operating mode 2 ms</b>   | 166 mm |
| <b>Operating mode 8 ms</b>   | 254 mm |

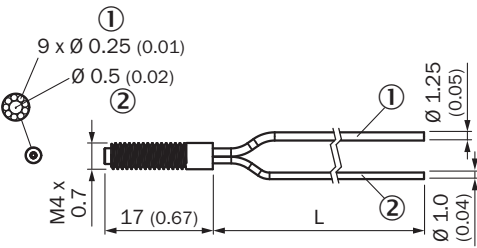
## Sensing ranges with GLL170

|                              |       |
|------------------------------|-------|
| <b>Operating mode 250 µs</b> | 21 mm |
|------------------------------|-------|

## Sensing ranges with GLL170T

|                              |       |
|------------------------------|-------|
| <b>Operating mode 50 µs</b>  | 37 mm |
| <b>Operating mode 250 µs</b> | 61 mm |

Dimensional drawing



Dimensions in mm (inch)  
For length of cable (L), see technical data  
① receiver  
② sender

Recommended accessories

Other models and accessories → [www.sick.com/Fiber-optic\\_cables](http://www.sick.com/Fiber-optic_cables)

|                                                                                     | Brief description                                                                                                                                                                                                                     | Type      | part no. |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|----------|
| Mounting systems                                                                    |                                                                                                                                                                                                                                       |           |          |
|   | <ul style="list-style-type: none"><li>• <b>Description:</b> Adapter sleeve for Ø 1.0 mm fiber-optic cable for adaptation to Ø 2.2 mm, included with delivery of fiber-optic cable</li><li>• <b>Items supplied:</b> 1 pieces</li></ul> | LLAC-AB10 | 2119446  |
|  | <ul style="list-style-type: none"><li>• <b>Description:</b> Adapter sleeve for Ø 1.3 mm fiber-optic cable for adaptation to Ø 2.2 mm, included with delivery of fiber-optic cable</li><li>• <b>Items supplied:</b> 1 pieces</li></ul> | LLAC-AB13 | 2119447  |
|  | <ul style="list-style-type: none"><li>• <b>Description:</b> Fiber cutting tool, in LLX scope of delivery</li><li>• <b>Items supplied:</b> 1 pieces</li></ul>                                                                          | LLAC-FC   | 2119448  |

## 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)