

LL3-LT31450S01

Fiber-optic cables

FIBER-OPTIC SENSORS





Ordering information

| Туре | part no. |
|----------------|----------|
| LL3-LT31450S01 | 2088456 |

Other models and accessories -> www.sick.com/Fiber-optic_cables

Detailed technical data

Features

| reatures | |
|-----------------------------------|--|
| Device type | Fiber-optic cables |
| Functional principle | Proximity system |
| Fiber-optic head design | Smooth sleeve, Long end sleeve |
| Application | Standard |
| Special features | Fibre-optic connection sleeves made of metal |
| Compatible fiber-optic amplifiers | GLL70, WLL80, WLL180, GLL170(T) |
| Sensing range max. | Depending on the fiber optic amplifier used |
| Optical fiber head | |
| Angle of dispersion | 60° |
| Integrated lens | No |
| Compatibility tip adapters | No |
| Optical fiber | |
| Compatibility with infrared light | Yes ¹⁾ |
| Adapter end sleeves required | No |
| | |

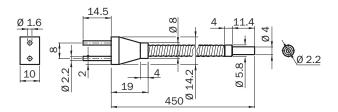
 $^{^{1)}}$ Reduced sensing ranges possible when using a fiber-optic amplifier with infrared light.

Mechanics

| Optical fiber head | |
|--|------------------------------------|
| Light emission | Axial |
| Smooth sleeve diameter | 5.8 mm |
| Optical fiber taper diameter | ≥ 4 mm |
| Optical fiber taper length after 2 mm | ≥ 11.4 mm |
| Optical fiber | |
| Fiber length | 450 mm |
| Bending radius | 20 mm |
| Dynamic flexibility (robotics) | No |
| Outside diameter, optical fiber cable connection | 2.2 mm |
| Fiber arrangement | Multi-fiber |
| Core structure | Multi-fiber |
| Material | |
| Optical fiber head | Stainless steel |
| Sheath | Chrome-plated helical metal spring |
| Fibers | Glass |

| Weight | 33 g |
|---|---|
| Ambient data | |
| Ambient data Ambient operating temperature | -10 °C +60 °C |
| 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 WLL180T | |
| Operating mode 16 µs | 50 mm |
| Operating mode 70 µs | 140 mm |
| Operating mode 250 µs | 240 mm |
| Operating mode 2 ms | 300 mm |
| Operating mode 8 ms | 310 mm |
| Note | Sensing ranges related to fiber-optic sensors with type of light: visible red light |
| Sensing ranges with GLL170 | |
| Operating mode 250 µs | 93 mm |
| Sensing ranges with GLL170T | |
| <u> </u> | |

Dimensional drawing LL3-LT31450



130 mm

242 mm

Operating mode 50 μs

Operating mode 250 µs

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Dimensions in mm (inch)

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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."

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