LL3-LT31450

Fiber-optic cables

FIBERS

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LL3-LT31450 | Fiber-optic cables
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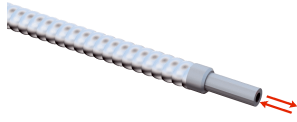
Ordering information

Type	Part no.
LL3-LT31450	2077269

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

Detailed technical data

Features

Device type	Fiber-optic cables
Functional principle	Proximity system
Fiber-optic head design	Smooth sleeve, Long end sleeve
Application	Standard
Compatible fiber-optic amplifiers	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	32 g

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

Operating mode 50 µs	165 mm
Operating mode 250 µs	254 mm

Dimensional drawing (Dimensions in mm (inch))

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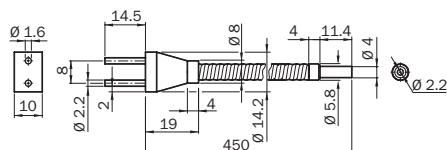
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We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions 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.

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