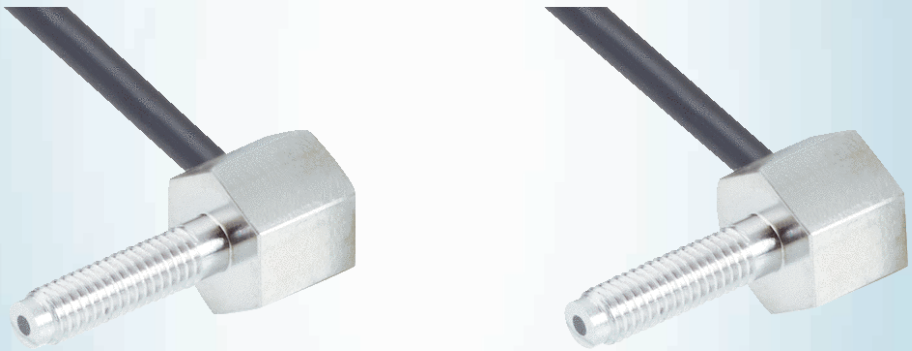
Data sheet



LLSE-R13001111020C2

Fiber-optic cables

FIBERS

SICK
Sensor Intelligence.

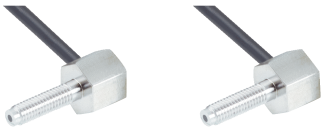


Illustration may differ

Ordering information

Type	part no.
LLSE-R1300111020C2	2115018

Included in delivery: LLAC-FC (1)

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

Detailed technical data

Features

Device type	Fiber-optic cables
Functional principle	Through-beam system, consisting of a sender and a receiver
Fiber-optic head design	Threaded sleeve, 90° deflection
Application	Standard
Compatible fiber-optic amplifiers	WLL80, WLL180, GLL170(T), WLL24 Ex
Sensing range max.	Depending on the fiber optic amplifier used
Optical fiber head	
Angle of dispersion	60°
Integrated lens	No
Compatibility tip adapters	Yes
Optical fiber	
Compatibility with infrared light	No
Optical fiber cable can be shortened	✓
Adapter end sleeves required	No
Items supplied	1 x fiber cutter (LLAC-FC), M3 mounting set (4 x M3 nut + 4 x M3 washer)

Mechanics

Optical fiber head	
Light emission	Radial
Thread diameter (housing)	M3
Optical fiber	
Fiber length	2,000 mm
Bending radius	2 mm
Dynamic flexibility (robotics)	No
Outside diameter, optical fiber cable connection	2.2 mm
Fiber arrangement	Singlefiber
Core structure	Ø 1,0 mm Singlefiber
Material	
Optical fiber head	Stainless steel
Sheath	Polyethylen (PE)
Fibers	PMMA
Weight	35 g

Ambient data

Ambient operating temperature	–40 °C ... +60 °C

Sensing ranges with WLL180T

Operating mode 16 µs	140 mm
Operating mode 70 µs	400 mm
Operating mode 250 µs	600 mm
Operating mode 2 ms	1,400 mm
Operating mode 8 ms	2,000 mm

Sensing ranges with GLL170

Operating mode 250 µs	240 mm

Sensing ranges with GLL170T

Operating mode 50 µs	300 mm
Operating mode 250 µs	490 mm

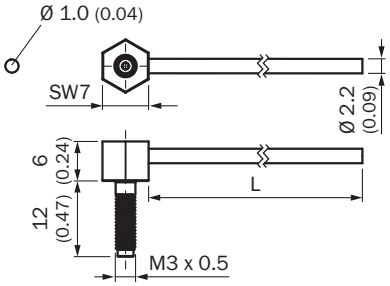
Certificates

RoHS manufacturer declaration	✓

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

Dimensional drawing



Dimensions in mm (inch)
For length of cable (L), see technical data

Recommended accessories

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

	Brief description	Type	part no.
Mounting systems			
	• **Description:** Fiber cutting tool, in LLX scope of delivery • **Items supplied:** 1 pieces	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