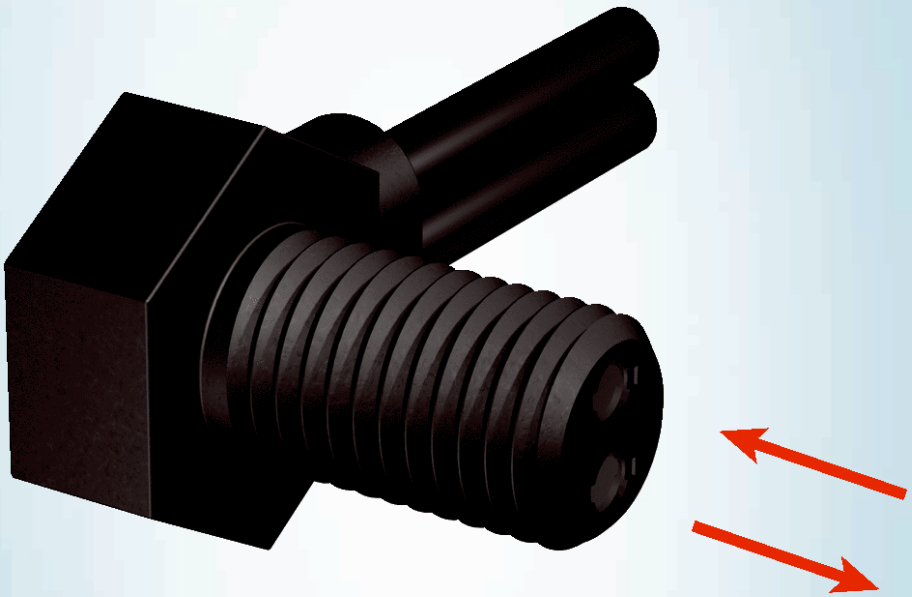
Data sheet

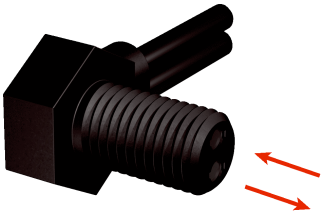


LL3-DV07

Fiber-optic cables

FIBER-OPTIC SENSORS

SICK
Sensor Intelligence.



Ordering information

Type	part no.
LL3-DV07	5322551

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	Threaded sleeve, 90° deflection
Application	High flexible (static)
Compatible fiber-optic amplifiers	GLL70, WLL80, WLL180, GLL170(T), WLL24 Ex
Sensing range max.	660 mm (Sensing range of WLL80 at 8 ms)
Minimal object diameter	0.015 mm [1]
Optical fiber head	
Angle of dispersion	16°
Integrated lens	Yes
Compatibility tip adapters	No
Optical fiber	
Compatibility with infrared light	No
Optical fiber cable can be shortened	✓
Adapter end sleeves required	No
Included with delivery	Mounting, 1 x M6 hexagon nut, FC fiber cutter (5304141)

[1] Minimum detectable object was determined at optimum measuring distance and optimum setting.

Mechanics

Optical fiber head	
Light emission	Radial
Thread diameter (housing)	M6
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	Singlefiber
Material	
Optical fiber head	Polyamid (PA)
Sheath	Polyethylen (PE)

Fibers	Polymethylmethacrylat (PMMA)
Weight	30 g

Ambient data

Ambient operating temperature	–40 °C ... +70 °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 GLL70

Operating mode 50 µs	65 mm
Operating mode 250 µs	200 mm
Operating mode 1 ms	285 mm
Operating mode 4 ms	590 mm

Sensing ranges with WLL80

Operating mode 16 µs	40 mm
Operating mode 70 µs	125 mm
Operating mode 250 µs	210 mm
Operating mode 500 µs	250 mm
Operating mode 1 ms	285 mm
Operating mode 2 ms	410 mm
Operating mode 8 ms	660 mm
Note	Sensing ranges related to fiber-optic sensors with type of light: visible red light

Sensing ranges with WLL180T

Operating mode 16 µs	20 mm
Operating mode 70 µs	110 mm
Operating mode 250 µs	180 mm
Operating mode 2 ms	400 mm

Operating mode 8 ms	650 mm
Note	Sensing ranges related to fiber-optic sensors with type of light: visible red light

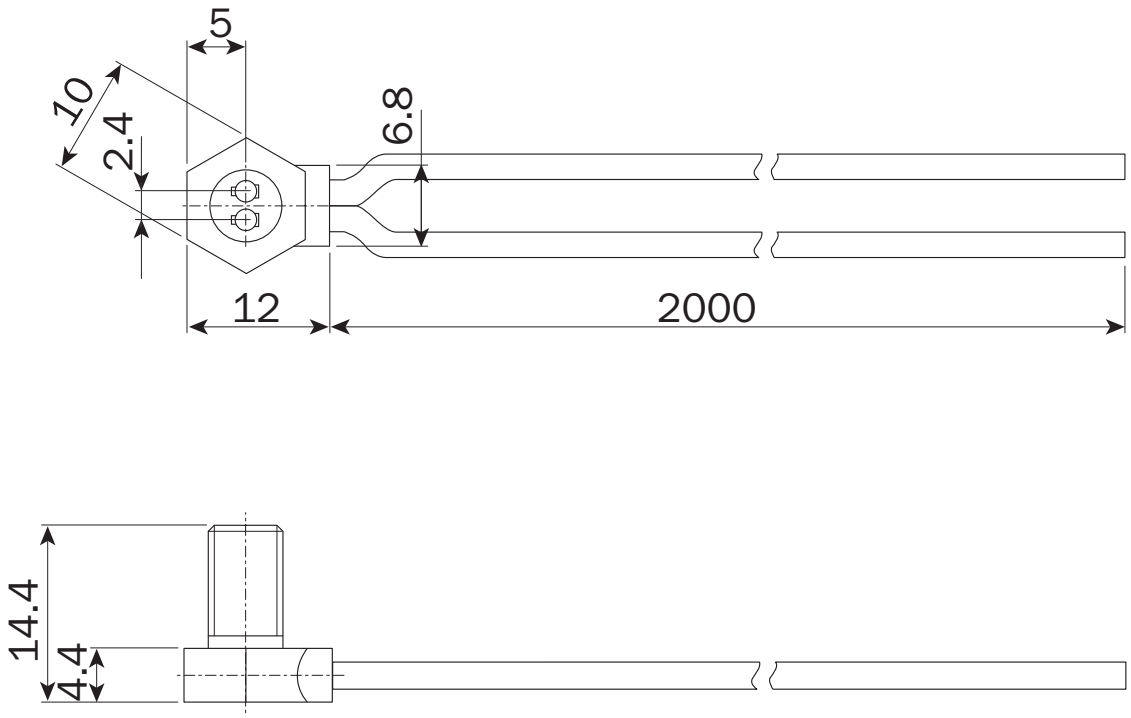
Sensing ranges with GLL170

Operating mode 250 µs	60 mm

Sensing ranges with GLL170T

Operating mode 50 µs	60 mm
Operating mode 250 µs	100 mm

Dimensional drawing LL3-DV05, LL3-DV06, LL3-DV07



Dimensions in mm (inch)

Recommended accessories

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

	Brief description	Type	part no.
device protection and care			
	Strich		On request
	Strich		On request

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.”

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