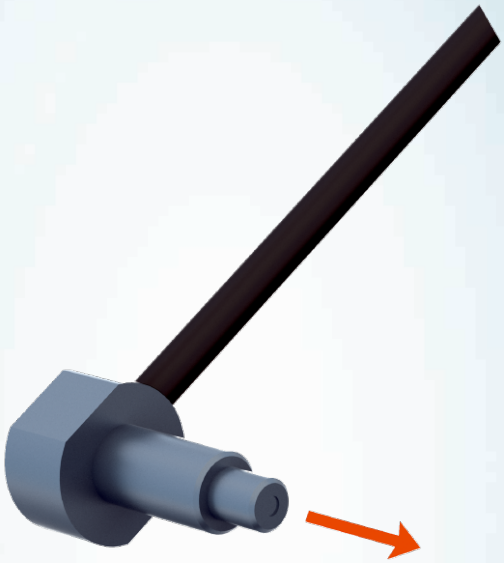
Product data sheet

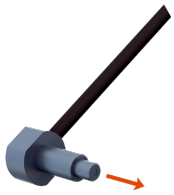


LL3-TV77

Fiber-optic cables

FIBERS

SICK
Sensor Intelligence.



Ordering information

Type	Part no.
LL3-TV77	5326557

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

Detailed technical data

Features

Device type	Fiber-optic cables
Functional principle	Through-beam system
Fiber-optic head design	Threaded sleeve, 90° deflection
Application	High flexible (static)
Compatible fiber-optic amplifiers	WLL80, WLL180, GLL170(T), WLL24 Ex
Sensing range max.	Depending on the fiber optic amplifier used
Minimal object diameter	0.4 mm [1)]
Optical fiber head	
Angle of dispersion	60°
Integrated lens	No
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, 4 x M4 hexagon nut, 4 x washer, 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)	M4
Optical fiber taper diameter	≥ 2.6 mm
Optical fiber taper length after 2 mm	≥ 3 mm
Optical fiber	
Fiber length	2,000 mm
Bending radius	2 mm
Dynamic flexibility (robotics)	No
Outside diameter, optical fiber cable connection	2.2 mm
Material	

Optical fiber head	Stainless steel
Sheath	Polyethylen (PE)
Fibers	Polymethylmethacrylat (PMMA)
Weight	33 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 WLL80

Note	340 mm 1,000 mm 1,800 mm 4,000 mm 4,000 mm Sensing ranges related to fiber-optic sensors with type of light: visible red light

Sensing ranges with WLL180T

Operating mode 16 µs	340 mm
Operating mode 70 µs	1,000 mm
Operating mode 250 µs	1,800 mm
Operating mode 2 ms	4,000 mm
Operating mode 8 ms	4,000 mm
Note	Sensing ranges related to fiber-optic sensors with type of light: visible red light

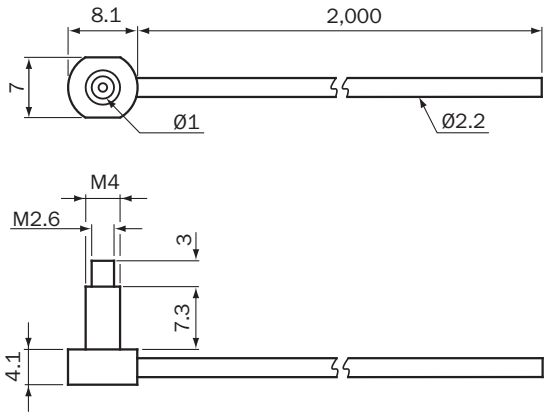
Sensing ranges with GLL170

Operating mode 250 µs	200 mm

Sensing ranges with GLL170T

Operating mode 50 µs	640 mm
Operating mode 250 µs	1,068 mm

Dimensional drawing (Dimensions in mm (inch))



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