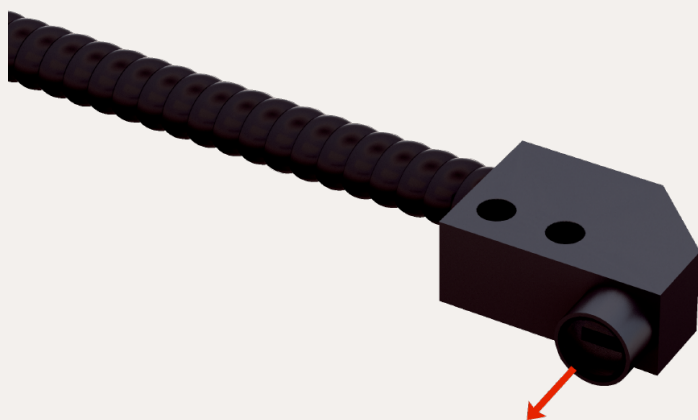




DATA SHEET

LL3-LM38751

Fiber-optic cables
Fiber-optic sensors

SICK

Sensor Intelligence

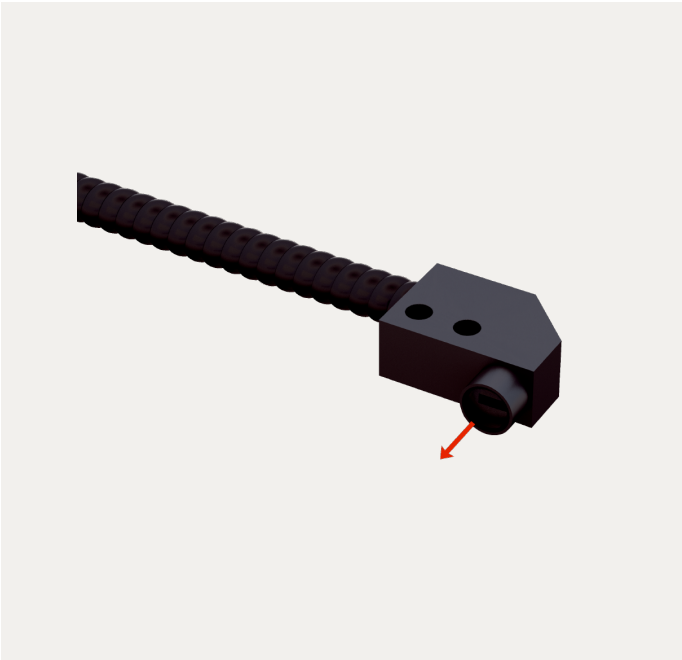


Illustration may differ

FIBER-OPTIC SENSORS

LL3-LM38751

ORDERING INFORMATION

Type	part no.
LL3-LM38751	2073504

Further device versions and accessories at 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	Flat type, 90° deflection
Application	Standard
Compatible fiber-optic amplifiers	GLL70, WLL80, WLL180, GLL170(T)
Sensing range max.	Depending on the fiber optic amplifier used
Minimal object diameter	0.5 mm
Optical fiber head	
Angle of dispersion	54°
Integrated lens	Yes
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	Radial
Optical fiber	Fiber length	750 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	Chrome-plated metal coil
	Sheath	Polyvinylchlorid (PVC)

	Fibers	Glass
Weight		83 g

AMBIENT DATA

Ambient operating temperature	-10 °C ... +60 °C
-------------------------------	-------------------

SENSING RANGES WITH WLL180T

Operating mode 16 µs	230 mm
Operating mode 70 µs	690 mm
Operating mode 250 µs	1,320 mm
Operating mode 2 ms	1,350 mm
Operating mode 8 ms	1,350 mm
Note	Sensing ranges related to fiber-optic sensors with type of light: visible red light

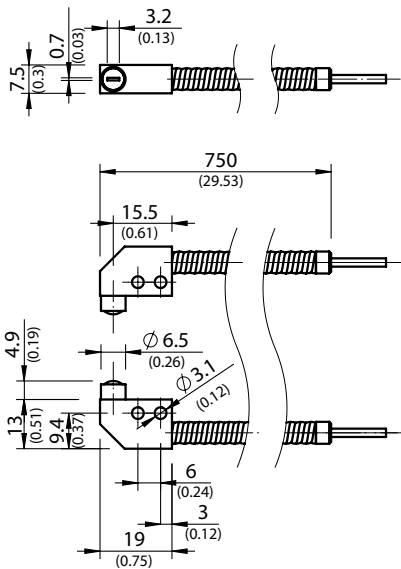
SENSING RANGES WITH GLL170

Operating mode 250 µs	465 mm
-----------------------	--------

SENSING RANGES WITH GLL170T

Operating mode 50 µs	780 mm
Operating mode 250 µs	1,321 mm

DIMENSIONAL DRAWING LL3-LM38751



Dimensions in mm (inch)

Further information as well as suitable accessories, example applications and downloads such as CAD dimensional models, operating instructions and software can be found at www.sick.com/2073504

SICK AG
WALDKIRCH
GERMANY
SICK.COM

SICK AT A GLANCE

SICK is a leading global technology company for intelligent sensors and integrated solutions in industrial automation. Our technologies set benchmarks, making your industrial processes more efficient, safer and more sustainable – both in logistics and manufacturing operations.

SICK combines sensor intelligence with industry expertise and certified consulting services. We provide the ideal foundation for scalable as well as tailor-made automation solutions and create added value along the entire value chain. Our close partnerships with our customers are more than just a promise: Together, we optimize productivity, improve quality, protect health and safety, and help build a sustainable future. All with empathy and trust.

Since 1946, we have been developing innovative technologies with passion and a pioneering spirit. With a global network in around 40 countries, SICK has a global presence and is always close by. The company's headquarters are located in Waldkirch near Freiburg, Germany. Our customers benefit from our understanding of both local and global requirements, which enables us to deliver tailor-made solutions

SICK
Sensor Intelligence