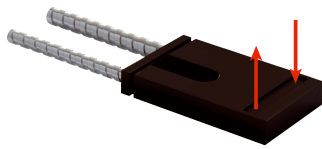


LL3-DH10

Fiber-optic cables

FIBER-OPTIC SENSORS

SICK
Sensor Intelligence.



Ordering information

Type	part no.
LL3-DH10	5326023

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	Flat type
Application	Heat-resistant ($\geq 100^{\circ}\text{C}$)
Compatible fiber-optic amplifiers	GLL70, WLL80, WLL180, GLL170(T)
Sensing range max.	81 mm (Sensing range of WLL80 at 8 ms)
Minimal object diameter	0.02 mm ¹⁾
Optical fiber head	
Compatibility tip adapters	No
Optical fiber	
Compatibility with infrared light	Yes ²⁾
Adapter end sleeves required	No

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

²⁾ Reduced sensing ranges possible when using a fiber-optic amplifier with infrared light.

Mechanics

Optical fiber head		
	Light emission	Axial
Optical fiber		
	Fiber length	3,000 mm
	Bending radius	25 mm
	Dynamic flexibility (robotics)	No
	Outside diameter, optical fiber cable connection	2.2 mm
	Fiber arrangement	Singlefiber
	Core structure	S: \varnothing 1,2 mm R: \varnothing 1,5 mm Singlefiber
Material		
	Optical fiber head	Polyphenylensulfid (PPS)
	Sheath	Stainless steel
	Fibers	Glass
Weight		14 g

Ambient data

Ambient operating temperature	-20 °C ... +250 °C
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Sensing ranges with WLL80

Operating mode 16 µs	2.5 mm ... 17 mm
Operating mode 70 µs	0 mm ... 30 mm
Operating mode 250 µs	0 mm ... 43 mm
Operating mode 500 µs	0 mm ... 51 mm
Operating mode 1 ms	0 mm ... 56 mm
Operating mode 2 ms	0 mm ... 69 mm
Operating mode 8 ms	0 mm ... 81 mm
Note	Sensing ranges related to fiber-optic sensors with type of light: visible red light

Sensing ranges with WLL180T

Operating mode 16 µs	4 mm ... 11 mm
Operating mode 70 µs	3 mm ... 18 mm
Operating mode 250 µs	3 mm ... 21 mm
Operating mode 2 ms	2 mm ... 24 mm
Operating mode 8 ms	2 mm ... 26 mm
Note	Sensing ranges related to fiber-optic sensors with type of light: visible red light

Sensing ranges with GLL170

Operating mode 250 µs	3.3 mm ... 16.8 mm
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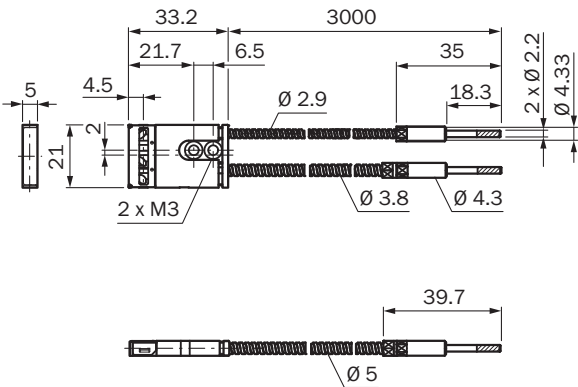
Sensing ranges with GLL170T

Operating mode 50 µs	1.8 mm ... 9 mm
Operating mode 250 µs	0 mm ... 13 mm

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 LL3-DH10



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