

LL3-DH01

LL3

FIBERS

SICK
Sensor Intelligence.



Ordering information

Type	Part no.
LL3-DH01	5308091

Other models and accessories → www.sick.com/LL3

Detailed technical data

Features

Device type	Fibers
Functional principle	Proximity system
For fiber-optic sensor	GLL170(T), WLL180, WLL80
Fiber length	2,000 mm
Jacket material	Fluorethylenpropylen (FEP)
Fiber head material	Stainless steel 1,4305
Outer diameter, fiber-optic cable connection	2.2 mm
Thread diameter (housing)	M6
Fiber-optic head design	Threaded sleeve
Fiber arrangement	Monofiber
Core structure	2 x Ø 1,5 mm ¹⁾ Monofiber
Angle of dispersion < 60°	No
Application	Heat-resistant (≥100 °C)
Diameter/thread size from 2 mm taper	≥ 4.9 mm
Length of taper	≥ 3 mm
Highly flexible/elastic fibers (bend radius 1–4 mm)	No
Adapter end sleeves required	No
Angle of dispersion	60°
Integrated lens	No
Minimal object diameter	0.015 mm ²⁾
Included with delivery	Mounting, 2 x M6 hexagon nut, 2 x washer, FC fiber cutter (5304141)
Compatibility tip adapters	No
Special features	Special applications: temperature-resistant up to 180 °C, maximum sensing range

¹⁾ C = Coaxial, S = Sender, E = Receiver.

²⁾ Minimum detectable object was determined at optimum measuring distance and optimum setting.

Mechanics/electronics

Bend radius, fibre-optic cable	35 mm
Ambient operating temperature	-40 °C ... +180 °C

Classifications

ECLASS 5.0	27270905
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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

Operating mode 16 μs	175 mm
Operating mode 70 μs	485 mm
Operating mode 250 μs	675 mm
Operating mode 500 μs	790 mm
Operating mode 1 ms	865 mm
Operating mode 2 ms	1,090 mm
Operating mode 8 ms	1,460 mm

Sensing ranges with WLL180T

Operating mode 16 μs	120 mm
Operating mode 70 μs	350 mm
Operating mode 250 μs	600 mm
Operating mode 2 ms	980 mm
Operating mode 8 ms	1,500 mm
Note	Sensing ranges related to fiber-optic sensors with type of light: visible red light

Sensing ranges with GLL170

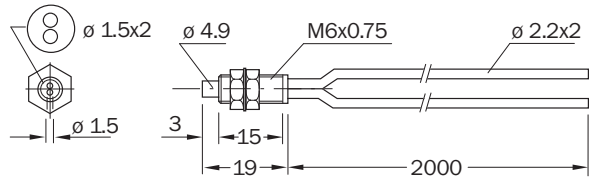
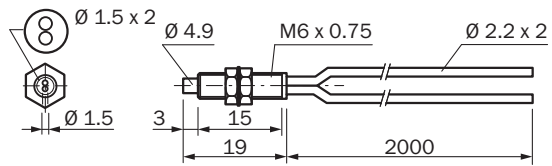
Operating mode 250 μs	150 mm
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Sensing ranges with GLL170T

Operating mode 50 μs	180 mm
Operating mode 250 μs	320 mm


Dimensional drawing (Dimensions in mm (inch))

LL3-DH01



Recommended accessories

Other models and accessories → www.sick.com/LL3

	Brief description	Type	Part no.
Device protection (mechanical)			
	Metal protection hose for LL3-Fibers with M6 threaded head; length 1000 mm, stainless steel, 1 pieces	BEF-LL3M61000	5331291
	Metal protection hose for LL3-Fibers with M6 threaded head; length 500 mm, stainless steel, 1 pieces	BEF-LL3M6500	5331290

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