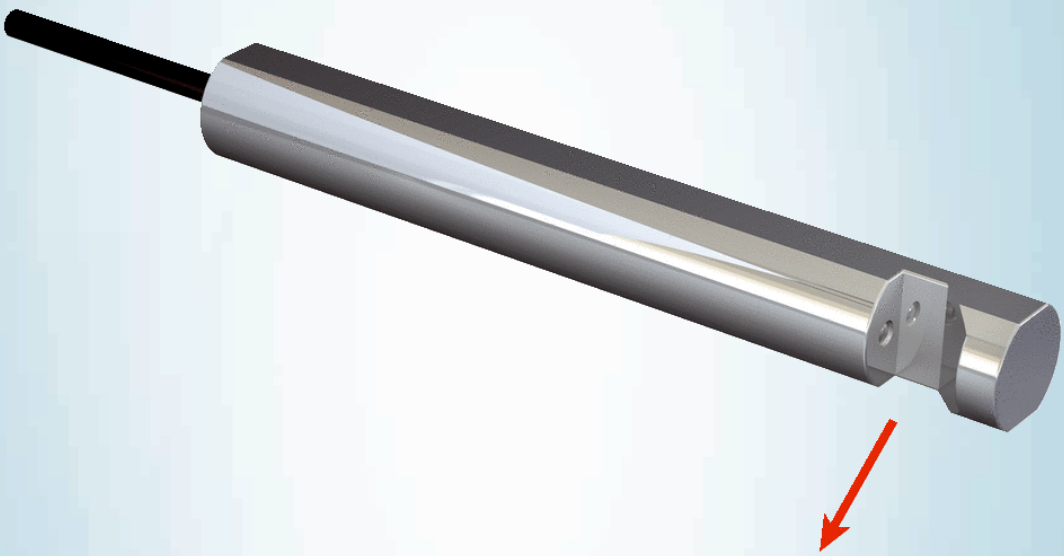
Product data sheet

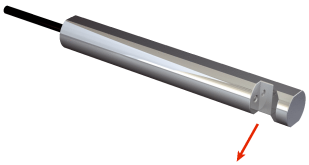


LL3-TS22

LL3

FIBERS

SICK
Sensor Intelligence.



Ordering information

Type	Part no.
LL3-TS22	5325944

Included in delivery: BF-WLL160-10 (1), FC (1)

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

Detailed technical data

Features

Device type	Fibers
Functional principle	Through-beam system
Functional principle detail	Consisting of a sender and a receiver
For fiber-optic sensor	GLL170(T), GLL170(T), WLL180, WLL80
Fiber length	2,000 mm
Fiber material	Polymethylmethacrylat (PMMA)
Jacket material	Polyethylen (PE)
Fiber head material	Stainless steel
Outer diameter, fiber-optic cable connection	1 mm
Fiber-optic cable cuttable	✓
Fiber-optic head design	90° deflection, Smooth sleeve, 90° deflection
Fiber arrangement	Monofiber
Core structure	Ø 0,5 mm Monofiber
Angle of dispersion < 60°	Yes
Compatibility with infrared light (1,450 nm)	No
Application	Lcd / clear material / semiconductor
Highly flexible/elastic fibers (bend radius 1–4 mm)	No
Adapter end sleeves required	Yes
Angle of dispersion	6.3°
Integrated lens	Yes
Minimal object diameter	0.05 mm [1)]
Included with delivery	Adapter sleeves, BF-WLL160-10 (1.0 mm) adapter sleeves, FC fiber cutter (5304141), protective cladding for fiber head
Compatibility tip adapters	No
Special features	Small 3° aperture angle

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

Mechanics/electronics

Bend radius, fibre-optic cable	25 mm
Ambient operating temperature	–40 °C ... +55 °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

Operating mode 16 µs	1,155 mm
Operating mode 70 µs	3,475 mm
Operating mode 250 µs	3,600 mm
Operating mode 500 µs	3,600 mm
Operating mode 1 ms	3,600 mm
Operating mode 2 ms	3,600 mm
Operating mode 8 ms	3,600 mm

Sensing ranges with WLL180T

Operating mode 16 µs	390 mm
Operating mode 70 µs	1,300 mm
Operating mode 250 µs	2,600 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

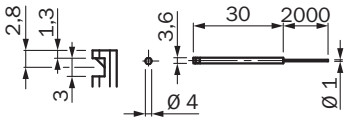
Operating mode 250 µs	1,470 mm

Sensing ranges with GLL170T

Operating mode 50 µs	1,130 mm
Operating mode 250 µs	1,980 mm

Dimensional drawing (Dimensions in mm (inch))

LL3-TS22



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