

LL3-DK08

Fiber-optic cables

FIBER-OPTIC SENSORS





Ordering information

Туре	part no.
LL3-DK08	5350097

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

Detailed technical data

Features

Fiber-optic cables Functional principle Fiber-optic head design Application Compatible fiber-optic amplifiers Sensing range max. Minimal object diameter Optical fiber head Angle of dispersion Integrated lens Compatibility tip adapters Compatibility with infrared light Optical fiber cable can be shortened Adapter end sleeves required Included with delivery Fiber-optic cables Proximity system Threaded sleeve Standard Standard Standard GLL70, WLL80, WLL180, GLL170(T) Depending on the fiber optic amplifier used O.015 mm ¹¹) Optical fiber head 60° No Yes Optical fiber Adapter end sleeves required Mounting, 2 x M3 hexagon nut, 1 x washer, FC fiber cutter (LLAC-FC 2119448), adapter sleeves LLAC-AB13 (1.3 mm)		
Fiber-optic head design Application Compatible fiber-optic amplifiers GLL70, WLL80, WLL180, GLL170(T) Sensing range max. Minimal object diameter Optical fiber head Angle of dispersion Integrated lens Compatibility tip adapters Compatibility with infrared light Optical fiber cable can be shortened Adapter end sleeves required Included with delivery Threaded sleeve Standard GLL70, WLL80, WLL180, GLL170(T) Depending on the fiber optic amplifier used 0.015 mm 1) 60° No Yes Mounting, 2 x M3 hexagon nut, 1 x washer, FC fiber cutter (LLAC-FC 2119448), adapter	Device type	Fiber-optic cables
Application Compatible fiber-optic amplifiers Sensing range max. Depending on the fiber optic amplifier used Ontical fiber head Angle of dispersion Integrated lens Compatibility tip adapters Optical fiber Compatibility with infrared light Optical fiber cable can be shortened Adapter end sleeves required Included with delivery Standard GLL70, WLL80, WLL180, GLL170(T) Depending on the fiber optic amplifier used 0.015 mm ¹) 60° No Yes Ves Mounting, 2 x M3 hexagon nut, 1 x washer, FC fiber cutter (LLAC-FC 2119448), adapter	Functional principle	Proximity system
Compatible fiber-optic amplifiers Sensing range max. Depending on the fiber optic amplifier used Ontical fiber head Angle of dispersion Integrated lens No Compatibility tip adapters Compatibility with infrared light Optical fiber cable can be shortened Adapter end sleeves required Included with delivery GLL70, WLL80, WLL180, GLL170(T) Depending on the fiber optic amplifier used 0.015 mm ¹) 60° No Yes Ves Mounting, 2 x M3 hexagon nut, 1 x washer, FC fiber cutter (LLAC-FC 2119448), adapter	Fiber-optic head design	Threaded sleeve
Sensing range max. Minimal object diameter Optical fiber head Angle of dispersion Integrated lens Compatibility tip adapters Optical fiber Compatibility with infrared light Optical fiber cable can be shortened Adapter end sleeves required Included with delivery Depending on the fiber optic amplifier used 0.015 mm ¹) No Yes No Yes Ves Mounting, 2 x M3 hexagon nut, 1 x washer, FC fiber cutter (LLAC-FC 2119448), adapter	Application	Standard
Minimal object diameter Optical fiber head Angle of dispersion Integrated lens Compatibility tip adapters Optical fiber Compatibility with infrared light Optical fiber cable can be shortened Adapter end sleeves required Included with delivery Onumber 10 Angle of dispersion 60° No Yes Yes Ves Included with delivery Mounting, 2 x M3 hexagon nut, 1 x washer, FC fiber cutter (LLAC-FC 2119448), adapter	Compatible fiber-optic amplifiers	GLL70, WLL80, WLL180, GLL170(T)
Optical fiber head Angle of dispersion Integrated lens No Compatibility tip adapters Optical fiber Compatibility with infrared light Optical fiber cable can be shortened Adapter end sleeves required Included with delivery Angle of dispersion 60° No Yes Yes Ves Mounting, 2 x M3 hexagon nut, 1 x washer, FC fiber cutter (LLAC-FC 2119448), adapter	Sensing range max.	Depending on the fiber optic amplifier used
Angle of dispersion Integrated lens Compatibility tip adapters Compatibility with infrared light Optical fiber Compatibility with infrared light Optical fiber cable can be shortened Adapter end sleeves required Adapter end sleeves required Included with delivery Angle of dispersion No Yes No ✓ Mounting, 2 x M3 hexagon nut, 1 x washer, FC fiber cutter (LLAC-FC 2119448), adapter	Minimal object diameter	0.015 mm ¹⁾
Integrated lens Compatibility tip adapters Optical fiber Compatibility with infrared light Optical fiber cable can be shortened Adapter end sleeves required Adapter end sleeves required Included with delivery No ✓ Yes Included with delivery No ✓ Yes Mounting, 2 x M3 hexagon nut, 1 x washer, FC fiber cutter (LLAC-FC 2119448), adapter	Optical fiber head	
Compatibility tip adapters Optical fiber Compatibility with infrared light Optical fiber cable can be shortened Adapter end sleeves required Included with delivery Yes Mounting, 2 x M3 hexagon nut, 1 x washer, FC fiber cutter (LLAC-FC 2119448), adapter	Angle of dispersion	60°
Optical fiber Compatibility with infrared light Optical fiber cable can be shortened Adapter end sleeves required Adapter end sleeves required Included with delivery No Yes Mounting, 2 x M3 hexagon nut, 1 x washer, FC fiber cutter (LLAC-FC 2119448), adapter	Integrated lens	No
Compatibility with infrared light Optical fiber cable can be shortened Adapter end sleeves required Adapter end sleeves required Included with delivery No Yes Mounting, 2 x M3 hexagon nut, 1 x washer, FC fiber cutter (LLAC-FC 2119448), adapter	Compatibility tip adapters	Yes
Optical fiber cable can be shortened Adapter end sleeves required Yes Included with delivery Mounting, 2 x M3 hexagon nut, 1 x washer, FC fiber cutter (LLAC-FC 2119448), adapter	Optical fiber	
Adapter end sleeves required Yes Included with delivery Yes Mounting, 2 x M3 hexagon nut, 1 x washer, FC fiber cutter (LLAC-FC 2119448), adapter	Compatibility with infrared light	No
Included with delivery Mounting, 2 x M3 hexagon nut, 1 x washer, FC fiber cutter (LLAC-FC 2119448), adapter	Optical fiber cable can be shortened	✓
	Adapter end sleeves required	Yes
	Included with delivery	

 $^{^{1)}}$ Minimum detectable object was determined at optimum measuring distance and optimum setting.

Mechanics

Optical fiber head	
Light emission	Axial
Thread diameter (housing)	M3
Optical fiber taper diameter	≥ 2 mm
Optical fiber taper length after 2 mm	≥ 1 mm
Optical fiber	
Fiber length	2,000 mm
Bending radius	1 mm
Dynamic flexibility (robotics)	No
Outside diameter, optical fiber cable connection	1.3 mm
Fiber arrangement	Singlefiber

 $^{^{1)}}$ C = Coaxial, S = Sender, E = Receiver.

²⁾ Stainless steel SUS303.

Core structure	2 x Ø 0,5 mm ¹⁾ Singlefiber
Material	
Optical fiber head	Stainless steel ²⁾
Sheath	Polyethylen (PE)
Fibers	Polymethylmethacrylat (PMMA)
Weight	18 g

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

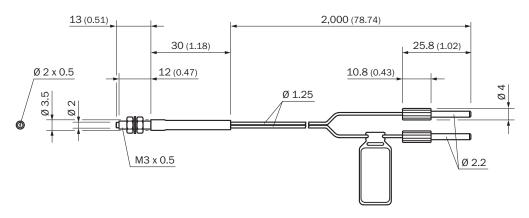
Ambient data

Ambient operating temperature	-55 °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

Dimensional drawing LL3-DK08



²⁾ Stainless steel SUS303.

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Dimensions in mm (inch)

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