SICK.COM

DATA SHEET

SLG50S-020FAKB1K01

FlexChain
Automation light grids

SICK Sensor Intelligence

Illustration may differ

AUTOMATION LIGHT GRIDS

SLG50S-020FAKB1K01

ORDERING INFORMATION

Type	part no.
SLG50S-020FAKB1K01	1108004

Further device versions and accessories at www.sick.com/FlexChain

DETAILED TECHNICAL DATA

FEATURES

Device version	FlexChain Guest
Sensor principle	Sender/receiver Light grid system
Minimum detectable object (MDO)	55 mm
Beam separation	50 mm
Optical light exit	Flat
Number of beams	4
Detection height	200 mm

MECHANICS/ELECTRONICS

Light source	Infrared light
Wave length	850 nm
Supply voltage V_s	Via FlexChain (host)
Output load, capacitive	100 nF
Output load, Inductive	1 H
Initialization time	1 s
Dimensions (W x H x D)	11.8 mm x 199.2 mm x 24.1 mm
Connection type	Cable with M8 male connector, 4-pin, 1.5 m Cable with female connector, M8, 4-pin
Display	LED
Synchronization	Via FlexChain (host)
Enclosure rating	IP65, IP67 [1]
Circuit protection	U_V connections, reverse polarity protected Interference pulse suppression Outputs overcurrent and short-circuit protected

[1] Operating in outdoor condition only with a external protection housing.

Protection class	III
Weight	206 g
Front screen	PMMA

[1] Operating in outdoor condition only with a external protection housing.

PERFORMANCE

Maximum range	6 m
Minimum range	≥ 0 m
Operating range	4 m
Scanning time	0.4 ms

AMBIENT DATA

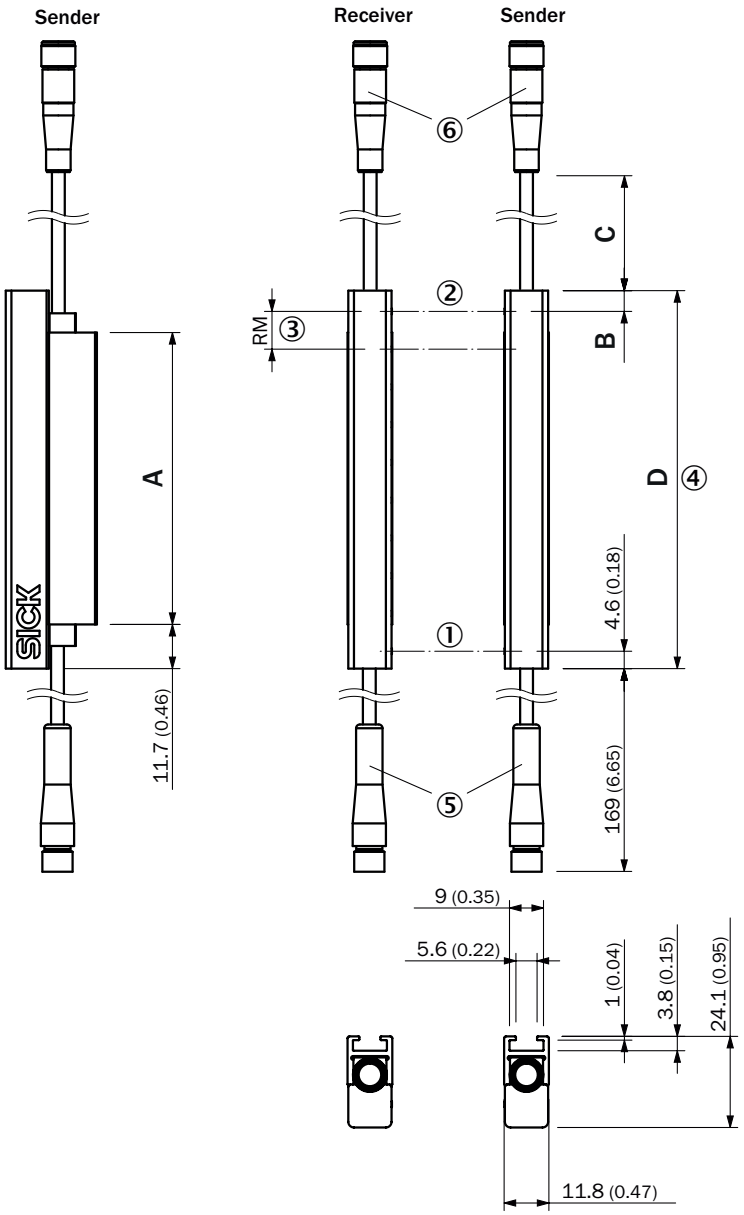
Shock resistance	10 g, 16 ms, DIN EN 60068-2-27
Vibration resistance	10-150 Hz 0.5 mm, IEC 60068-2-6
EMC	EN 61000-6-2, EN 61000-6-4
Ambient light immunity	Indirect: 50,000 lx [1]
Ambient operating temperature	–25 °C ... +55 °C
Ambient temperature, storage	–25 °C ... +70 °C

[1] Sunlight.

CERTIFICATES

EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓
China RoHS	✓
cULus certificate	✓
Photobiological safety (IEC EN 62471)	✓
Information according to Art. 3 of Data Act (Regulation EU 2023/2854)	✓

DIMENSIONAL DRAWING SLGXXX-XXXFXXXXXXX

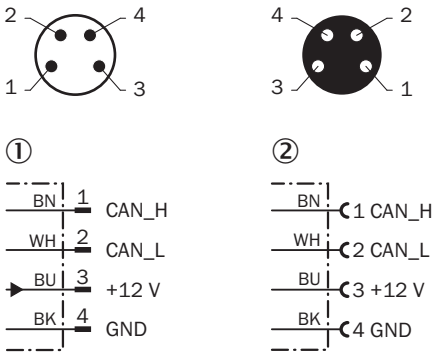


Dimensions in mm (inch)
① First beam
② last beam
③ beam separation (RM)
④ Housing length
⑤ cable with male connector, M8, 4-pin (fixed)
⑥ cable with female connector, M8, 4-pin (0.5 m / 1.5 m)

Dimensions in mm (inch)		
–	Length of stabilizer	Housing length
	A	**D**
SLGxxx-**0 10**xxxxxxxx	77 (3.03)	99,2 (3.91)
SLGxxx-**02 0**xxxxxxxx	178 (7.01)	199,2 (7.84)
SLGxxx-**03 0**xxxxxxxx	276 (10.87)	299,2 (11.78)
SLGxxx-**04 0**xxxxxxxx	376 (14.8)	399,2 (15.72)
SLGxxx-**05 0**xxxxxxxx	475 (18.7)	499,2 (19.65)
SLGxxx-**06 0**xxxxxxxx	576 (22.68)	599,2 (23.6)

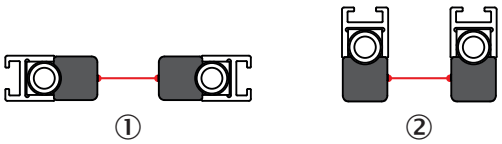
Dimensions in mm (inch)		
SLGxxx-**07 0**xxxxxxxx	676 (26.61)	699,2 (27.53)
SLGxxx-**08 0**xxxxxxxx	776 (30.55)	799,2 (31.46)
SLGxxx-**09 0**xxxxxxxx	875 (34.45)	899,2 (35.4)
SLGxxx-**100**xxxxxxxx	975 (38.39)	999,2 (39.34)
SLGxxx-**120**xxxxxxxx	1.175 (46.26)	1.199,2 (47.21)
SLGxxx-**140**xxxxxxxx	1.374 (54,09)	1.399,2 (55.09)
	–	
–	Distance: Housing edge - last beam	–
	B [1]	
SLG**10**x-xxxxxxxxxxx	4,6 (0.18)	
SLG**25**x-xxxxxxxxxxx	19,6 (0.77)	
SLG**50**x-xxxxxxxxxxx	44,6 (1.76)	
[1] for detection height less than 700 mm, the dimension deviates up to 1 mm from the dimensions specified here.		
	–	
–	Length of cable	–
	C	
SLGxxx-xxxxxx**A**xxxx	500 (19.69)	
SLGxxx-xxxxxx**B**xxxx	1.500 (59.06)	

CONNECTION TYPE AND DIAGRAM



① male connector M8, 4-pin
② Cable with female connector, M8, 4-pin

INSTRUCTION FOR INSTALLATION SLIM & FLAT



① Slim model = light emission on narrow side
② Flat model = light emission on broad side

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/1108004

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SICK AT A GLANCE

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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

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