



SLG50S-050SBKB1K01

FlexChain

SWITCHING AUTOMATION LIGHT GRIDS

SICK
Sensor Intelligence.



Illustration may differ

Ordering information

| Type | Part no. |
|--------------------|----------|
| SLG50S-050SBKB1K01 | 1108096 |

Only in conjunction with FlexChain host

[1091608](https://www.sick.com/1091608) | FC1A-AZ2A1A: Standard I/O

[1091609](https://www.sick.com/1091609) | FC1A-BZ2A1A: Advanced I/O

[1091610](https://www.sick.com/1091610) | FC1A-CZ2A1A: RS-485

[1091611](https://www.sick.com/1091611) | FC1A-DZ2A1A: CANopen

Other models and accessories → 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 | Slim |
| Number of beams | 10 |
| Detection height | 500 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) | 24.1 mm x 499.2 mm x 11.8 mm |
| Connection type | Cable with M8 male connector, 4-pin, Cable with female connector, M8, 4-pin, 1.5 m |
| Indication | LED |
| Synchronization | Via FlexChain (host) |
| Enclosure rating | IP65, IP67 1) |
| Circuit protection | U_V connections, reverse polarity protected |

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

| | |
|-------------------------|---|
| | Interference pulse suppression Outputs overcurrent and short-circuit protected |
| Protection class | III |
| Weight | 365 g |
| Front screen | PMMA |

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

Performance

| | |
|------------------------|-------|
| Maximum range | 9.1 m |
| Minimum range | ≥ 0 m |
| Operating range | 6.5 m |
| Scanning time | 1 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.

Classifications

| | |
|-----------------------|----------|
| ECLASS 5.0 | 27270910 |
| ECLASS 5.1.4 | 27270910 |
| ECLASS 6.0 | 27270910 |
| ECLASS 6.2 | 27270910 |
| ECLASS 7.0 | 27270910 |
| ECLASS 8.0 | 27270910 |
| ECLASS 8.1 | 27270910 |
| ECLASS 9.0 | 27270910 |
| ECLASS 10.0 | 27270910 |
| ECLASS 11.0 | 27270910 |
| ECLASS 12.0 | 27270910 |
| ETIM 5.0 | EC002549 |
| ETIM 6.0 | EC002549 |
| ETIM 7.0 | EC002549 |
| ETIM 8.0 | EC002549 |
| UNSPSC 16.0901 | 39121528 |

Dimensional drawing (Dimensions in mm (inch))

SLGxxx-xxxSxxxxxxx



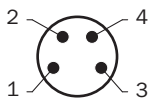
- ① First beam
- ② Last beam
- ③ Beam separation (RM)
- ④ Housing length
- ⑤ Cable with male connector, M8, 4-pin (fixed)
- ⑥ Cable with female connector, M8, 4-pin (0.5 m / 1.5 m)

Dimensions in mm (inch)

| | Length of stabilizer | Housing length |
|----------------------------|----------------------|----------------|
| | A | D |
| SLGxxx- 010 xxxxxxx | 77 (3.03) | 99,2 (3.91) |
| SLGxxx- 020 xxxxxxx | 178 (7.01) | 199,2 (7.84) |
| SLGxxx- 030 xxxxxxx | 276 (10.87) | 299,2 (11.78) |
| SLGxxx- 040 xxxxxxx | 376 (14.8) | 399,2 (15.72) |

| Dimensions in mm (inch) | | |
|-------------------------|--|-----------------|
| SLGxxx-05 0xxxxxxx | 475 (18.7) | 499,2 (19.65) |
| SLGxxx-06 0xxxxxxx | 576 (22.68) | 599,2 (23.6) |
| SLGxxx-07 0xxxxxxx | 676 (26.61) | 699,2 (27.53) |
| SLGxxx-08 0xxxxxxx | 776 (30.55) | 799,2 (31.46) |
| SLGxxx-09 0xxxxxxx | 875 (34.45) | 899,2 (35.4) |
| SLGxxx-100xxxxxxx | 975 (38.39) | 999,2 (39.34) |
| SLGxxx-120xxxxxxx | 1.175 (46.26) | 1.199,2 (47.21) |
| SLGxxx-140xxxxxxx | 1.374 (54,09) | 1.399,2 (55.09) |
| | Distance: Housing edge - last beam | |
| | B¹⁾ | |
| SLG10x-xxxxxxxxxx | 4,6 (0.18) | |
| SLG25x-xxxxxxxxxx | 19,6 (0.77) | |
| SLG50x-xxxxxxxxxx | 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-xxxxxAxxxx | 500 (19.69) | |
| SLGxxx-xxxxxBxxxx | 1.500 (59.06) | |

Connection type and diagram



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

Functional principle

Slim & Flat



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

Recommended accessories

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

| | Brief description | Type | Part no. |
|---|--|---------------|----------|
| Mounting brackets and plates | | | |
|  | Side mounting for switching automation light grids, SLG-2 | BEF-NUT-SLG2 | 2111624 |
|  | 4 pieces, Mounting bracket for switching automation light grids, SLG-2 | BEF-SLG2-SET1 | 2111623 |

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