



# SLG50S-100FBKB1K01

FlexChain

SWITCHING AUTOMATION LIGHT GRIDS

**SICK**  
Sensor Intelligence.



Illustration may differ

### Ordering information

| Type               | Part no. |
|--------------------|----------|
| SLG50S-100FBKB1K01 | 1108061  |

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](http://www.sick.com/FlexChain)



### Detailed technical data

#### Features

|  |                                      |
|--|--------------------------------------|
| <b>Device version</b>                  | FlexChain Guest                      |
| <b>Sensor principle</b>                | Sender/receiver<br>Light grid system |
| <b>Minimum detectable object (MDO)</b> | 55 mm                                |
| <b>Beam separation</b>                 | 50 mm                                |
| <b>Optical light exit</b>              | Flat                                 |
| <b>Number of beams</b>                 | 20                                   |
| <b>Detection height</b>                | 1,000 mm                             |

#### Mechanics/electronics

|  |  |
|--|--|
| <b>Light source</b>                    | Infrared light   |
| <b>Wave length</b>                     | 850 nm   |
| <b>Supply voltage <math>V_s</math></b> | Via FlexChain (host)   |
| <b>Output load, capacitive</b>         | 100 nF   |
| <b>Output load, Inductive</b>          | 1 H  |
| <b>Initialization time</b>             | 1 s  |
| <b>Dimensions (W x H x D)</b>          | 11.8 mm x 999.2 mm x 24.1 mm   |
| <b>Connection type</b>                 | Cable with M8 male connector, 4-pin, Cable with female connector, M8, 4-pin, 1.5 m |
| <b>Indication</b>                      | LED  |
| <b>Synchronization</b>                 | Via FlexChain (host)   |
| <b>Enclosure rating</b>                | IP65, IP67<br>1)   |
| <b>Circuit protection</b>              | $U_V$ connections, reverse polarity protected                                      |

<sup>1)</sup> Operating in outdoor condition only with a external protection housing.

|                         |   |
|-------------------------|---|
|                         | Interference pulse suppression<br>Outputs overcurrent and short-circuit protected |
| <b>Protection class</b> | III   |
| <b>Weight</b>           | 630 g   |
| <b>Front screen</b>     | PMMA  |

<sup>1)</sup> Operating in outdoor condition only with a external protection housing.

Performance

|                        |        |
|------------------------|--------|
| <b>Maximum range</b>   | 9.1 m  |
| <b>Minimum range</b>   | ≥ 0 m  |
| <b>Operating range</b> | 6.5 m  |
| <b>Scanning time</b>   | 1.8 ms |

Ambient data

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

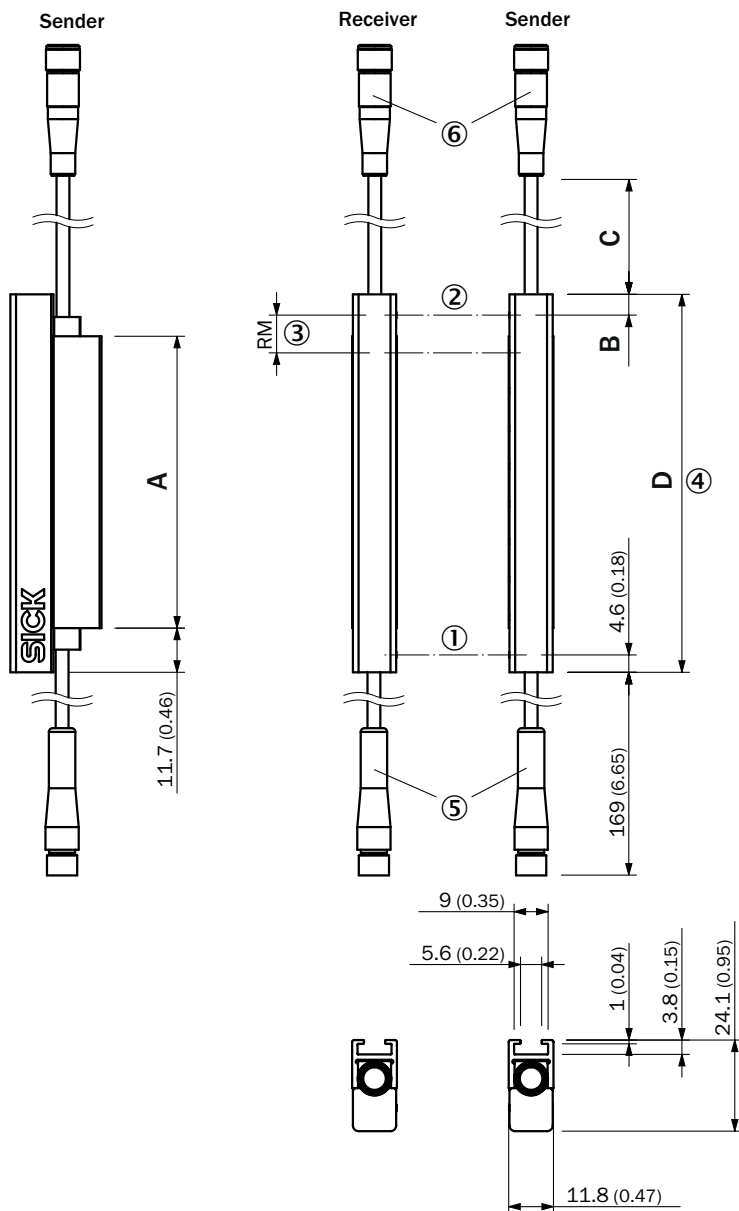
<sup>1)</sup> Sunlight.

Classifications

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

### Dimensional drawing (Dimensions in mm (inch))

SLGxxx-xxxFxxxxxxx



- 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 |
|                             | <b>A</b>             | <b>D</b>       |
| SLGxxx- <b>0 10</b> xxxxxxx | 77 (3.03)            | 99,2 (3.91)    |
| SLGxxx- <b>02 0</b> xxxxxxx | 178 (7.01)           | 199,2 (7.84)   |
| SLGxxx- <b>03 0</b> xxxxxxx | 276 (10.87)          | 299,2 (11.78)  |
| SLGxxx- <b>04 0</b> xxxxxxx | 376 (14.8)           | 399,2 (15.72)  |

| Dimensions in mm (inch)     |  |                 |
|-----------------------------|--|-----------------|
| SLGxxx- <b>05 0</b> xxxxxxx | 475 (18.7)   | 499,2 (19.65)   |
| SLGxxx- <b>06 0</b> xxxxxxx | 576 (22.68)  | 599,2 (23.6)    |
| SLGxxx- <b>07 0</b> xxxxxxx | 676 (26.61)  | 699,2 (27.53)   |
| SLGxxx- <b>08 0</b> xxxxxxx | 776 (30.55)  | 799,2 (31.46)   |
| SLGxxx- <b>09 0</b> xxxxxxx | 875 (34.45)  | 899,2 (35.4)    |
| SLGxxx- <b>100</b> xxxxxxx  | 975 (38.39)  | 999,2 (39.34)   |
| SLGxxx- <b>120</b> xxxxxxx  | 1.175 (46.26)  | 1.199,2 (47.21) |
| SLGxxx- <b>140</b> xxxxxxx  | 1.374 (54,09)  | 1.399,2 (55.09) |
|                             | Distance: Housing edge - last beam   |                 |
|                             | <b>B<sup>1)</sup></b>  |                 |
| SLG <b>10</b> x-xxxxxxxxx   | 4,6 (0.18)   |                 |
| SLG <b>25</b> x-xxxxxxxxx   | 19,6 (0.77)  |                 |
| SLG <b>50</b> x-xxxxxxxxx   | 44,6 (1.76)  |                 |
| <sup>1)</sup>               | for detection height less than 700 mm, the dimension deviates up to 1 mm from the dimensions specified here. |                 |
|                             | Length of cable  |                 |
|                             | <b>C</b>   |                 |
| SLGxxx-xxxxx <b>A</b> xxxx  | 500 (19.69)  |                 |
| SLGxxx-xxxxx <b>B</b> xxxx  | 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](http://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  |

## SICK AT A GLANCE

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Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

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