



## Switching automation light grids SLG, SGS

SGS4-S124P7PS1W07



**Model Name** > [SGS4-S124P7PS1W07](#)  
**Part No.** > [1212463](#)

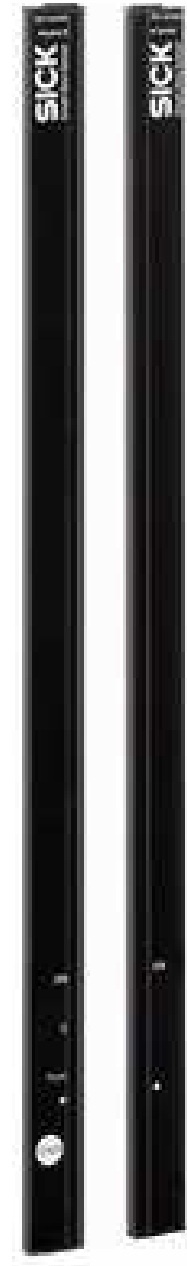


#### At a glance

- Variable monitoring lengths from 120 mm up to 1,400 mm (in 160 mm increments)
- Maximum range 10 m
- Response time 18 ms
- 25 mm or 45 mm detection resolution with 40 mm or 80 mm beam spacing possible
- Order-picking with extra-bright job LEDs on the sender and receiver sides
- IP 65 protection for various environmental conditions
- Highly immune to sunlight at 150,000 lx

#### Your benefits

- Small, slim and sleek design enables easy integration into applications
- Capacitive teach-in button and LEDs make commissioning easier for complex solutions
- Slim and flat models offer flexible mounting options
- User-defined factory preset configuration or flexible configuration with teach-in button
- Optical synchronization eliminates the need to lay cables, saving time
- Stealth detection in public places - at only 8 mm x 25 mm, it fits just about anywhere and can be imbedded inside walls, doors, conveyors, and machines, reducing damage
- Auto-teach and auto-muting enable Plug & Play. And, an alignment aid and "Click & Go" provide faster installation.



#### Features

|                                  |                   |
|----------------------------------|-------------------|
| Technology:                      | Sender/receiver   |
| Minimum detectable object (MDO): | Cross beam, 25 mm |
| Beam separation:                 | 40 mm             |
| Number of beams:                 | 32                |
| Detection height:                | 1,240 mm          |

|                           |  |
|---------------------------|--|
| Optical light exit:       | Slim   |
| Configuration:            | Without teach button with configuration software |
| Cross beam/parallel beam: | Cross beam active                                |
| Output 1:                 | Output 1 inactive, if light beam interrupted     |
| Automatic teach:          | Automatic teach active                           |
| Alignment aid:            | Without alignment aid                            |
| Muting function:          | Muting function inactive                         |

### Performance

|                |  |
|----------------|--|
| Maximum range: | 10 m <sup>1)</sup>                         |
| Minimum range: | Multiple scan: $\geq 0.3$ mm <sup>2)</sup> |
| Working range: | 7 m  |
| Response time: | Multiple scan 57 ms                        |

<sup>1)</sup> No reserve for environmental issue and deterioration of the diode <sup>2)</sup> Aperture  $\pm 10^\circ$

### Interfaces

|                        |                                      |
|------------------------|--------------------------------------|
| Output type:           | 1 x PNP                              |
| Electrical connection: | Short cable with connector M8, 4-pin |
| Inputs:                | Teach input                          |

### Mechanics/electronics

|  |   |
|--|---|
| Wave length:                               | IR 950 nm   |
| Supply voltage Vs:                         | DC 24 V, $\pm 20$ %   |
| Power consumption sender <sup>1)</sup> :   | 232 mA  |
| Power consumption receiver <sup>2)</sup> : | 70 mA   |
| Output current I <sub>max</sub> :          | 100 mA  |
| Output load capacitive:                    | 100 nF  |
| Output load inductive:                     | 1 H   |
| Initialization time:                       | 1 s   |
| Dimensions (W x H x D):                    | 25 mm x 1,312.4 mm x 8 mm   |
| Housing material:                          | PMMA  |
| Indication:                                | LED   |
| Circuit protection:                        | Output Q short-circuit protected<br>Interference suppression<br>VS connections reverse-polarity protected |
| Weight:                                    | 160 g   |
| Switching frequency:                       | 500 kHz   |
| Aluminum stabilizer:                       | Without stabilizer  |
| Synchronization:                           | Optical   |

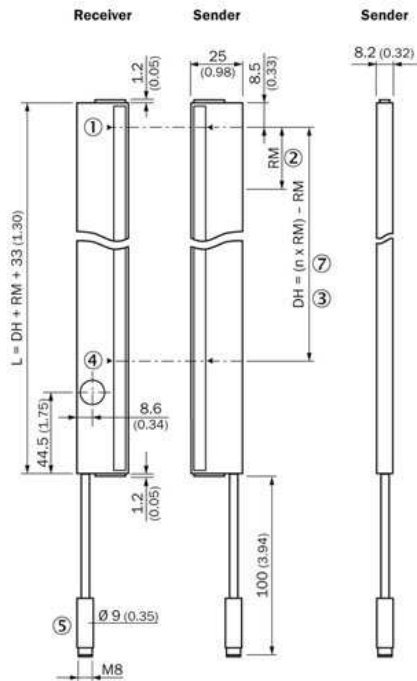
<sup>1) 2)</sup> Without load

### Ambient data

|                         |  |
|-------------------------|--|
| Protection class:       | III  |
| EMC:                    | EN 60947-5-2   |
| Ambient temperature:    | Operation: -25 ... +55 °C<br>Storage: -25 ... +70 °C                 |
| Vibration resistance:   | 5 g, 10 Hz ... 55 Hz (IEC 68-2-6)                                    |
| Shock load:             | 10 g/DIN EN 60068-2-29/16 ms   |
| Ambient light immunity: | Direct: $\geq 100,000$ lx, Indirect: $\geq 150,000$ lx <sup>1)</sup> |

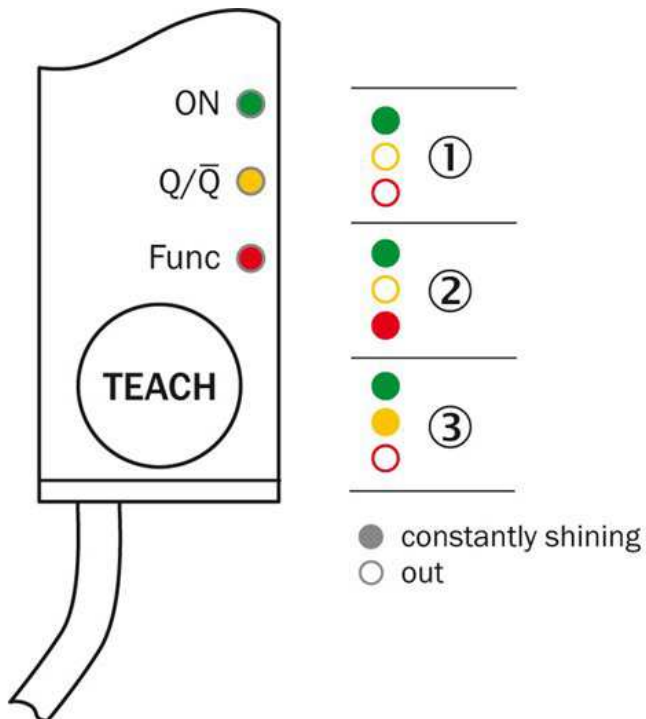
### Dimensional drawing

Slim, without stabilizer



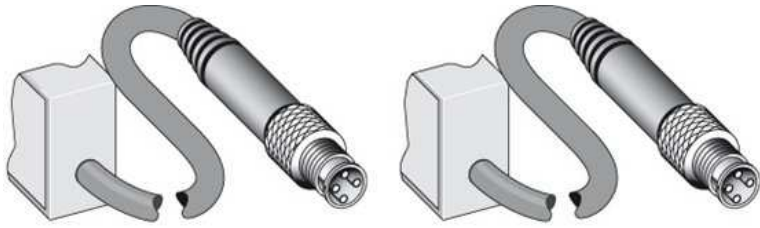
- |1| Last beam
- |2| Beam separation RM
- |3| DH - Detection height (n x 40 mm) - RM
- |4| First beam
- |5| Connection
- |6| n = beam

### Receiver, LED indication

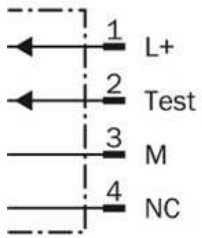


- |1| Supply voltage
- |2| Active, if teach-in button is pressed
- |3| No object in the light path

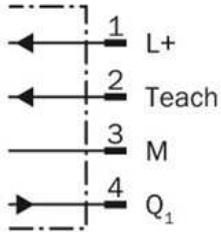
## Connection type and diagram



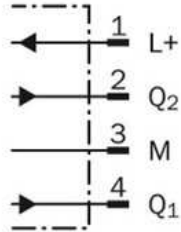
### Sender



### Receiver PNP/NPN



### Receiver 2 x PNP/2 x NPN



## Special functions

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## Setting the switching threshold

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## Configuration mode

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