



## Switching automation light grids SLG, SGS

SGS4-S092P7PS1W00



**Model Name** > [SGS4-S092P7PS1W00](#)  
**Part No.** > [1208596](#)



**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      |
| Task:                            | Switching light grid |
| Minimum detectable object (MDO): | Parallel beam, 45 mm |
| Beam separation:                 | 40 mm                |
| Number of beams:                 | 24                   |

|                           |                                                  |
|---------------------------|--------------------------------------------------|
| Detection height:         | 920 mm                                           |
| Optical light exit:       | Slim                                             |
| Configuration:            | Without teach button with configuration software |
| Cross beam/parallel beam: | Parallel beam active                             |
| Output 1:                 | Output 1 active, if light beam interrupted       |
| Automatic teach:          | Automatic teach inactive                         |
| Alignment aid:            | Without alignment aid                            |
| Muting function:          | Muting function inactive                         |

## Performance

|                |                      |
|----------------|----------------------|
| Maximum range: | 10 m <sup>1)</sup>   |
| Minimum range: | Parallel beam: ≥0 mm |
| Working range: | 7 m                  |
| Response time: | Parallel beam 19 ms  |

<sup>1)</sup> No reserve for environmental issue and deterioration of the diode

## 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 $V_s$ <sup>1)</sup> :                       | DC 24 V, ± 20 %                                                                                           |
| Power consumption sender <sup>2)</sup> :                   | 184 mA                                                                                                    |
| Power consumption receiver <sup>3)</sup> : <sup>4)</sup> : | 70 mA                                                                                                     |
| Residual ripple:                                           | < 5 Vpp                                                                                                   |
| Output current $I_{max.}$ :                                | 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 992.4 mm x 8 mm                                                                                   |
| Housing material:                                          | PMMA                                                                                                      |
| Indication:                                                | LED                                                                                                       |
| Enclosure rating:                                          | IP 65                                                                                                     |
| Circuit protection:                                        | Output Q short-circuit protected<br>Interference suppression<br>VS connections reverse-polarity protected |
| Weight:                                                    | 120 g                                                                                                     |
| Switching frequency:                                       | 500 kHz                                                                                                   |
| Aluminum stabilizer:                                       | Without stabilizer                                                                                        |
| Synchronization:                                           | Optical                                                                                                   |

<sup>1)</sup> Limit values <sup>2)</sup> <sup>3)</sup> <sup>4)</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

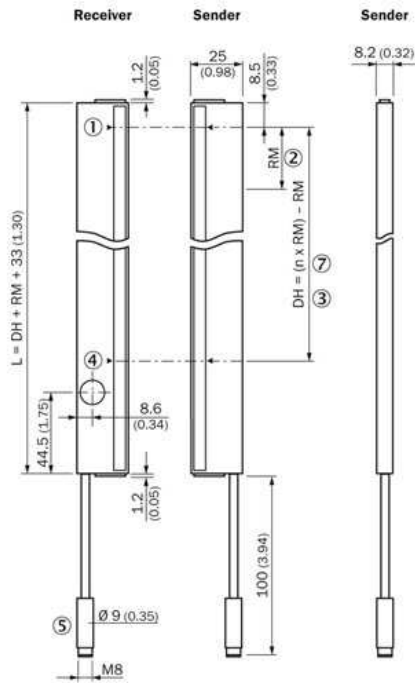
Ambient light immunity:

Direct:  $\geq 100,000$  lx, Indirect:  $\geq 150,000$  lx <sup>1)</sup>

1) Sunlight

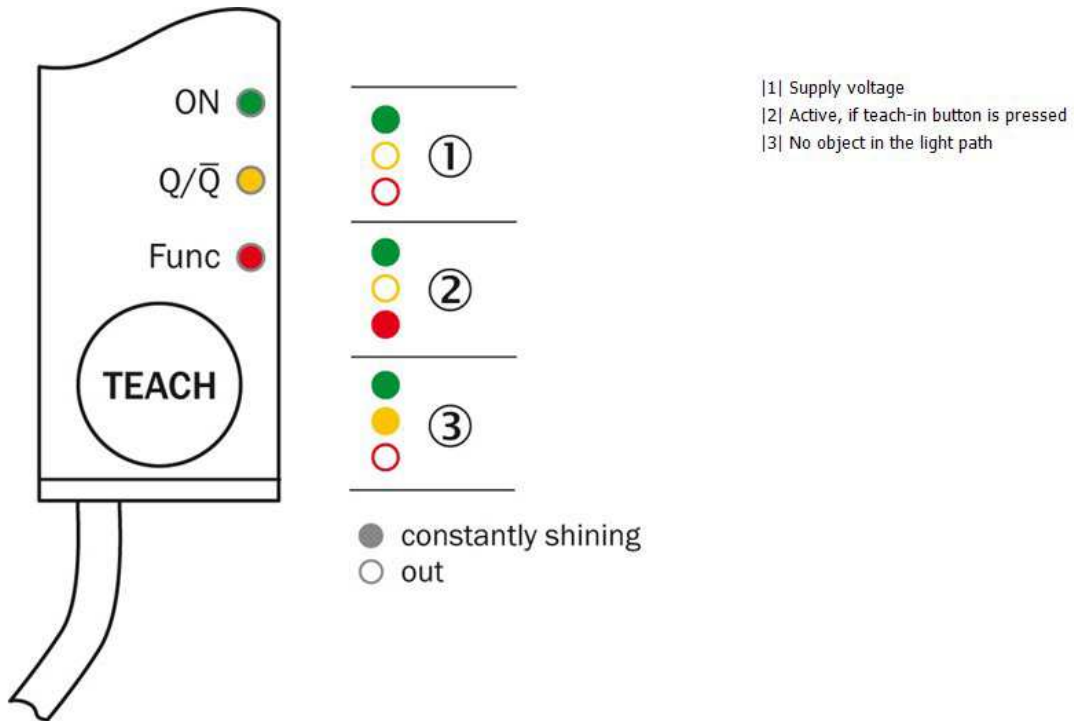
## Dimensional drawing

Slim, without stabilizer

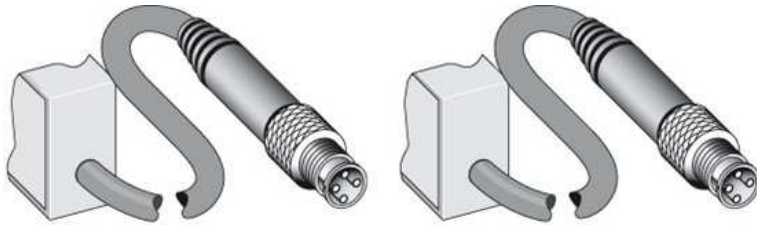


- |1| Last beam
- |2| Beam separation RM
- |3| DH - Detection height (n x 40 mm) - RM
- |4| First beam
- |5| Connection
- |6| n = beam

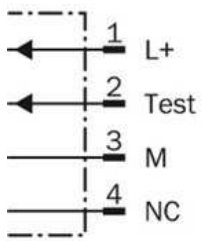
## Receiver, LED indication



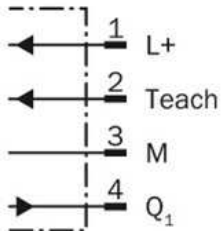
## Connection type and diagram



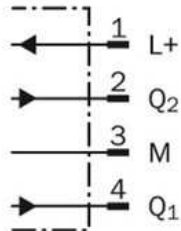
### Sender



### 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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