



## Smart light grids SGS

SGS4-S108P3PS2T03



**Model Name** > [SGS4-S108P3PS2T03](#)  
**Part No.** > [1210418](#)



**At a glance**

- Variable detection lengths from 600 mm up to 1,400 mm (in 160 mm increments)
- Simple teach-in setup via cable
- Optional parameter setting with teach-in button, no PC required
- Maximum range 10 m
- Response time 18 ms
- 25 mm or 45 mm MDO possible
- Highly immune to sunlight at 150,000 lx
- Small blind zone < 11 mm

**Your benefits**

- Small, slim and sleek design enables easy integration into applications
- Slim and flat models offer flexible mounting options and optimize shelf/bin space while reducing damage
- Customized preset configurations or set parameters via one-touch teach-in with no PC
- Optical synchronization eliminates the need to lay cables, saving time
- Optional: Capacitive teach-in button and LEDs make commissioning easier for complex solutions
- 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):	Multiple scan: $\geq 25$ mm <sup>1)</sup>
Beam separation:	40 mm
Optical light exit:	Slim

Number of beams:	28
Detection height:	1,080 mm
Cross beam/parallel beam:	Cross beam active
Output 1:	Output 1 inactive, if light beam interrupted
Automatic teach:	Automatic teach inactive
Alignment aid:	Without alignment aid
Muting function:	Muting function inactive
Configuration:	Teach button with configuration software

<sup>1)</sup> 25 mm MDO limited detection area

## Performance

Maximum range:	4 m <sup>1)</sup>
Minimum range:	Multiple scan: $\geq 0.3$ mm <sup>2)</sup>
Response time:	Multiple scan: $\geq 57$ ms <sup>3)</sup>
Working range:	3 m

<sup>1)</sup> No reserve for environmental issue and deterioration of the diode <sup>2)</sup> Aperture  $\pm 10^\circ$  <sup>3)</sup> With resistive load

## Interfaces

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

## Mechanics/electronics

Wave length:	IR 950 nm
Supply voltage Vs:	DC 24 V <sub>...</sub> , $\pm 20$ % <sup>1)</sup>
Power consumption sender:	208 mA <sup>2)</sup>
Power consumption receiver::	70 mA <sup>3) 4)</sup>
Ripple:	< 5 Vpp
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 1,152.4 mm x 8 mm
Housing material:	PMMA
Indication:	LED
Synchronization:	Optical
Enclosure rating:	IP 65
Circuit protection:	Output Q short-circuit protected, Interference suppression, VS connections reverse-polarity protected
Weight:	140 g
Power consumption:	208 mA <sup>5)</sup>
Aluminum stabilizer:	With stabilizer
Switching frequency:	500 kHz

<sup>1)</sup> Limit values <sup>2) 3) 4) 5)</sup> Without load

## Ambient data

Protection class:	III
EMC:	EN 60947-5-2

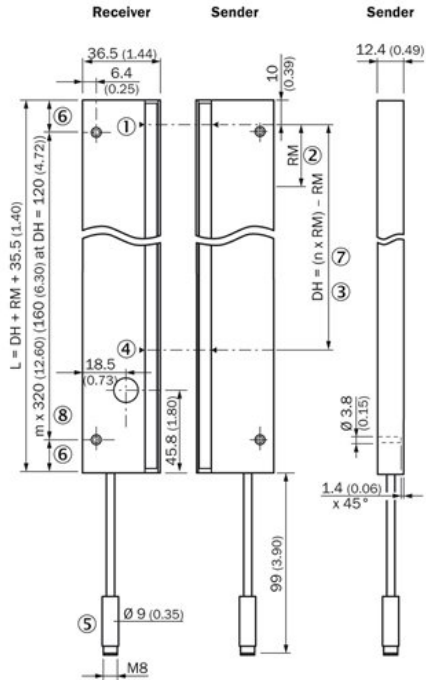
Ambient temperature:  
 Ambient light safety:  
 Vibration resistance:  
 Shock load:

Operation: -25 ... 55 °C, Storage: -25 ... 70 °C  
 Direct:  $\geq 100,000$  lx, Indirect:  $\geq 150,000$  lx <sup>1)</sup>  
 5 g, 10 Hz ... 55 Hz (IEC 68-2-6)  
 10 g/DIN EN 60068-2-29/16 ms

<sup>1)</sup> Sunlight

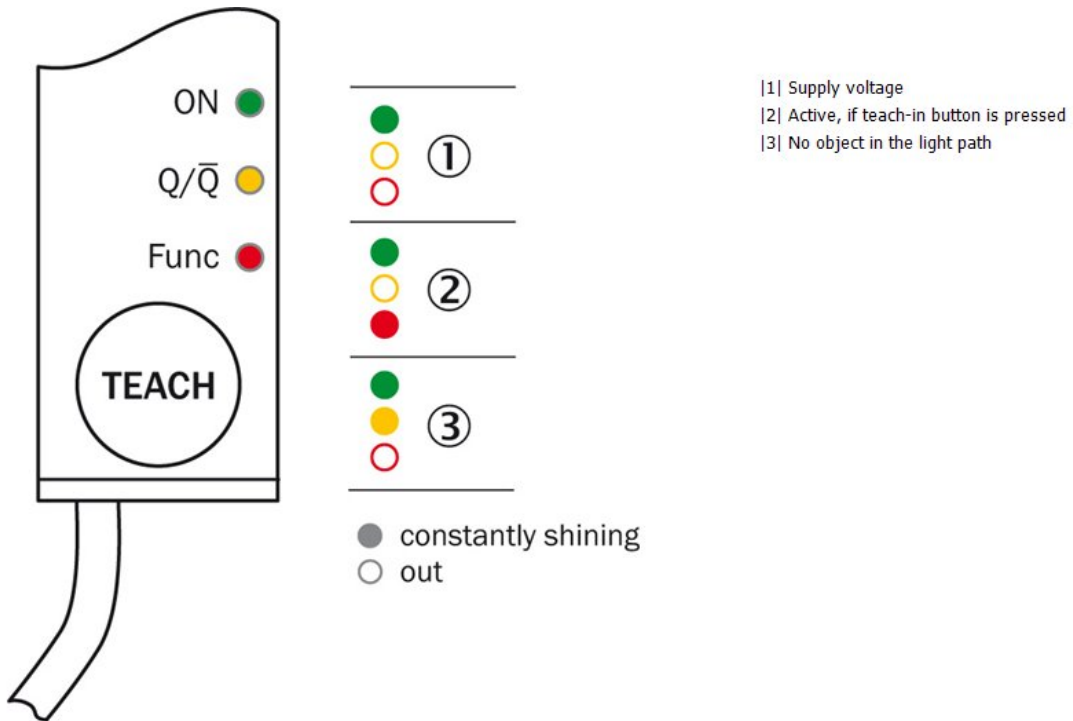
## Dimensional drawing

Slim, with stabilizer

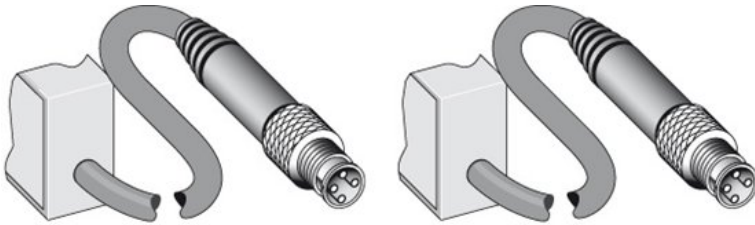


- [1] Last beam
- [2] Beam separation RM
- [3] DH - Detection height (n x 40 mm) - RM
- [4] First beam
- [5] Connection
- [6] Same distance
- [7] n = beam
- [8] m = mounting hole

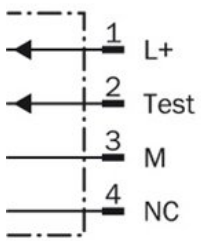
## Adjustments



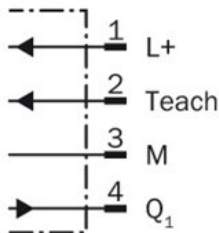
## Anschlussart und -schema



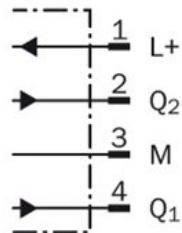
### Sender



### Receiver PNP/NPN



### Receiver 2 x PNP/2 x NPN



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