



## Switching automation light grids SLG, SGS

SGS4-S108F7TS2W17



**Model Name** > [SGS4-S108F7TS2W17](#)  
**Part No.** > [1209503](#)



**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) <sup>1)</sup> :	Cross beam, 25 mm
Beam separation:	40 mm
Number of beams:	28

Detection height:	1,080 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
Output 2:	Output 2 inactive, if light beam interrupted
Muting function output 2:	Without muting function at output 2
Alarm output 2:	Alarm output at output 2 inactive

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

## 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:	2 x PNP
Electrical connection:	Short cable with connector M12, 4-pin

## Mechanics/electronics

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

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

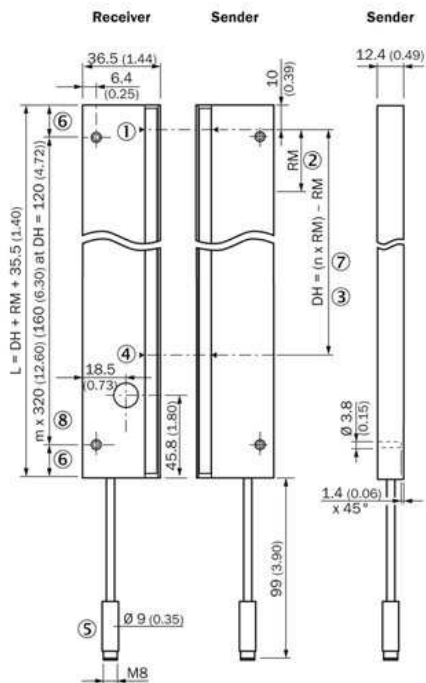
## Ambient data

Protection class: III  
 EMC: EN 60947-5-2  
 Ambient temperature: Operation: -25 ... +55 °C  
 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: ≥100,000 lx, Indirect: ≥150,000 lx <sup>1)</sup>

<sup>1)</sup> Sunlight

## Dimensional drawing

Slim, with stabilizer

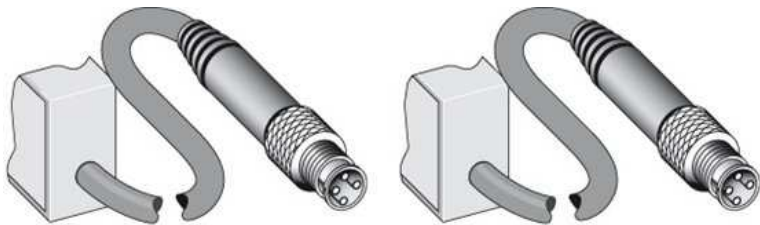


- |1| Last beam
- |2| Beam separation RM
- |3| DH - Detection height (n x 40 mm) - RM
- |4| First beam
- |5| Connection
- |6| Same distance
- |7| n = beam
- |8| m = mounting hole

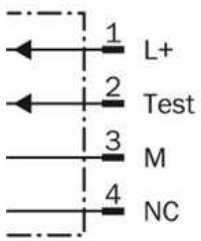
Receiver, LED indication



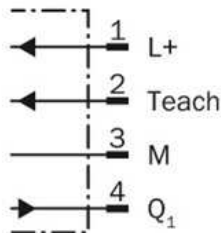
Connection type and diagram



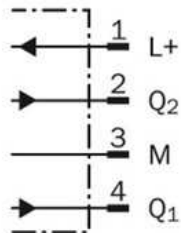
Sender



Receiver  
PNP/NPN



Receiver  
2 x PNP/2 x NPN



## Special functions

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## Setting the switching threshold

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