



## Switching automation light grids SLG, SGS

SGS4-F076F3PS1W14



**Model Name** > [SGS4-F076F3PS1W14](#)  
**Part No.** > [1209181](#)



#### 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:	20

Detection height:	760 mm
Optical light exit:	Flat
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 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

## Performance

Maximum range:	4 m <sup>1)</sup>
Minimum range:	Parallel beam: $\geq 0$ mm
Working range:	3 m
Response time:	Parallel beam 19 ms

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

## Interfaces

Output type:	2 x PNP
Electrical connection:	Short cable with connector M8, 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> :	160 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 832.4 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:	100 g
Switching frequency:	500 kHz
Aluminum stabilizer:	Without stabilizer
Synchronization:	Optical

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

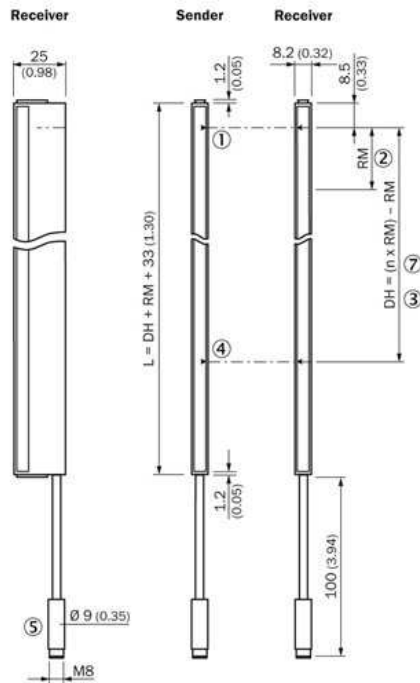
Ambient light immunity:

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

<sup>1)</sup> Sunlight

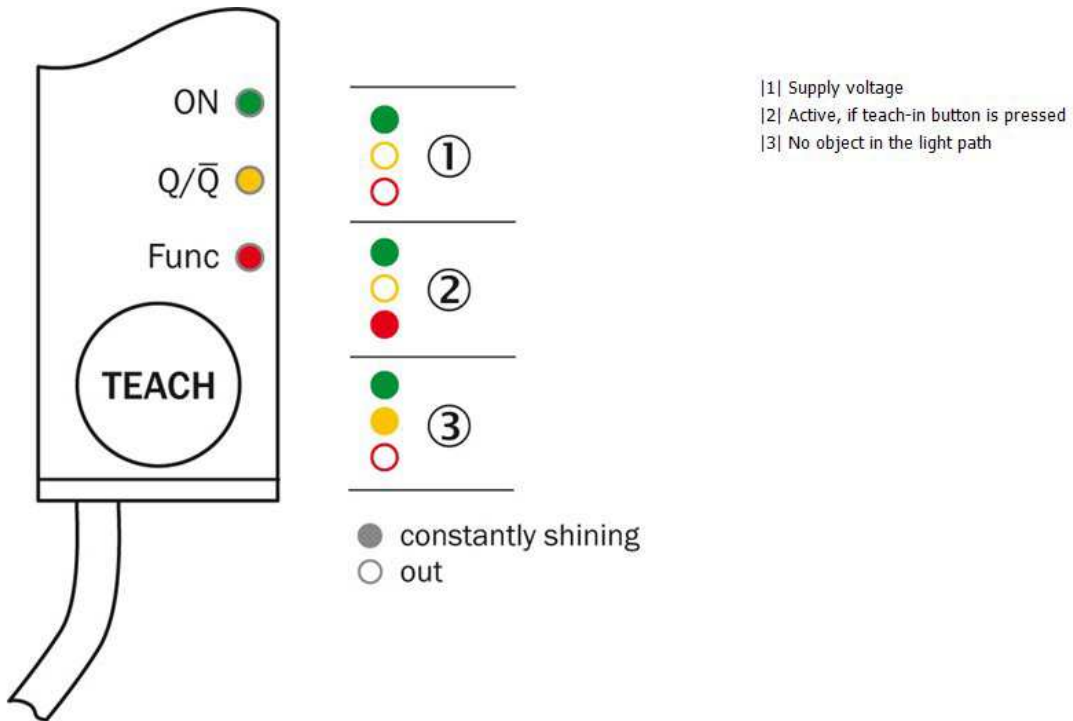
## Dimensional drawing

Flat, without stabilizer

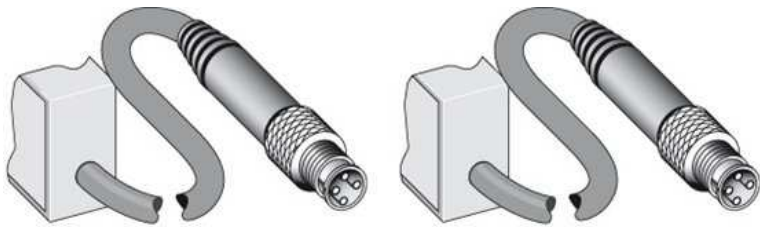


- |1| Last beam
- |2| Beam separation RM
- |3| DH - Detection height (n x 40 mm) - RM
- |4| First beam
- |5| Connection
- |6| n = beam

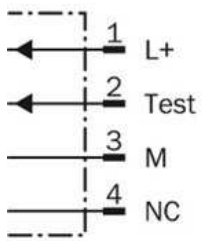
Receiver, LED indication



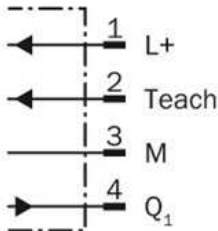
Connection type and diagram



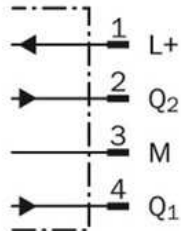
Sender



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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