

SGS4-S076P3PS1W01

SWITCHING AUTOMATION LIGHT GRIDS





Ordering information

Туре	Part no.
SGS4-S076P3PS1W01	1211895

Other models and accessories → www.sick.com/SLG

Illustration may differ



Detailed technical data

Features

Sensor principle	Sender/receiver
Minimum detectable object (MDO)	Cross beam, 25 mm ¹⁾
Beam separation	40 mm
Optical light exit	Slim
Number of beams	20
Detection height	760 mm
Parameterization	None
Cross beam/parallel beam	Cross 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 deactivated

 $^{^{1)}}$ 25 mm MD0 limited detection area.

Mechanics/electronics

,	
Light source	Infrared light
Wave length	950 nm
Supply voltage \mathbf{V}_{s}	DC24 V, ± 20 %
Power consumption receiver	≤ 70 mA
Output current I _{max.}	100 mA
Output load, capacitive	100 nF
Output load, Inductive	1 H
Initialization time	1 s
Switching output	PNP
Inputs	Teach-in input (receiver)

 $^{^{1\!\!\!/}}$ Operating in outdoor condition only with a external protection housing.

	Test input (sender)
	HIGH = 10 V 30 V / LOW = < 5 V
Dimensions (W x H x D)	25 mm x 832.4 mm x 8.2 mm
Connection type	Cable with M8 male connector, 4-pin
Housing material	PMMA
Indication	LED
Synchronization	Optical
Enclosure rating	IP65 1)
Circuit protection	U _V connections, reverse polarity protected Output Q short-circuit protected Interference pulse suppression
Protection class	III
Weight	100 g
Pulse frequency	500 kHz
Aluminum stabilizer	Without stabilizer

 $^{^{1)}}$ Operating in outdoor condition only with a external protection housing.

Performance

Maximum range	4 m ¹⁾
Minimum range	Cross beam: ≥ 0.3 m ²⁾
Operating range	3 m
Response time	Cross beam, 57 ms

 $^{^{1)}\,\}mathrm{No}$ reserve for environmental issue and deterioration of the diode.

Ambient data

Shock resistance	10 g / DIN EN 60068-2-29 / 16 ms
Vibration resistance	5 g, 10 Hz 55 Hz (IEC 68-2-6)
EMC	EN 60947-5-2
Ambient light immunity	Direct: 100,000 lx ¹⁾ Indirect: 150,000 lx
Ambient operating temperature	-25 °C +55 °C
Ambient temperature, storage	-25 °C +70 °C

¹⁾ Sunlight.

Classifications

eCl@ss 5.0	27270910
eCl@ss 5.1.4	27270910
eCl@ss 6.0	27270910
eCl@ss 6.2	27270910
eCl@ss 7.0	27270910
eCl@ss 8.0	27270910
eCl@ss 8.1	27270910
eCl@ss 9.0	27270910

²⁾ Aperture ± 10°.

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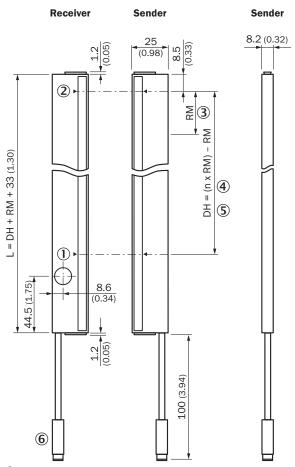
SWITCHING AUTOMATION LIGHT GRIDS

eCl@ss 10.0	27270910
eCl@ss 11.0	27270910
eCl@ss 12.0	27270910
ETIM 5.0	EC002549
ETIM 6.0	EC002549
ETIM 7.0	EC002549
ETIM 8.0	EC002549
UNSPSC 16.0901	39121528

Dimensional drawing (Dimensions in mm (inch))

Sxx-Sxxxxxxx1xxx

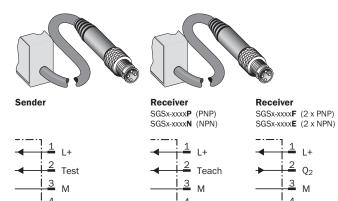
Slim, without stabilizer



- ① First beam
- ② Last beam
- 3 Beam separation (RM)
- Number of beams (n)
- ⑤ Detection height (DH)
- 6 Connection

Connection type and diagram

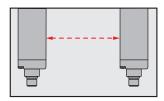
Connection type and diagram



Concept of operation

Specific features

Optical synchronization



The light grid communicates via the light beams. A cable is not necessary for the optical synchronization.

Functional principle

Slim & Flat



- ① Slim model = light emission on narrow side
- ② Flat model = light emission on broad side

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Recommended accessories

Other models and accessories → www.sick.com/SLG

	Brief description	Туре	Part no.
Mounting brackets and plates			
BBCC	Mounting bracket for light grids from a detection height of 600 mm (with slot, recommended for compensation of material extension caused by temperature), mounting position: front, 2x BEF-SLG1, 2x BEF-SLG2	BEF-SLG-SET1	2055427
Plug connectors and cables			
	Head A: female connector, M8, 4-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 2 m	YF8U14- 020VA3XLEAX	2095888

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For us, that is "Sensor Intelligence."

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