

SGS4-S092P7TC2T00

SWITCHING AUTOMATION LIGHT GRIDS





Ordering information

Туре	Part no.
SGS4-S092P7TC2T00	1217024

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

Illustration may differ



Detailed technical data

Features

Sensor principle	Sender/receiver
Minimum detectable object (MDO)	Parallel beam, 45 mm
Beam separation	40 mm
Optical light exit	Slim
Number of beams	24
Detection height	920 mm
Parameterization	Teach-in button
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 deactivated

Mechanics/electronics

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Light source	Infrared light
Wave length	950 nm
Supply voltage V _s	DC24 V, ± 20 %
Power consumption receiver	≤ 70 mA
Output current I _{max.}	100 mA
Output load, capacitive	100 nF
Output load, Inductive	1H
Initialization time	1s
Switching output	PNP
Inputs	Teach-in input (receiver) Test input (sender) HIGH = 10 V 30 V / LOW = < 5 V

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

Dimensions (W x H x D)	36.5 mm x 992.4 mm x 12.4 mm
Connection type	Cable with M12 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	120 g
Pulse frequency	250 kHz
Aluminum stabilizer	With stabilizer

¹⁾ Operating in outdoor condition only with a external protection housing.

Performance

Maximum range	10 m ¹⁾
Minimum range	Parallel beam: ≥ 0 m
Operating range	7 m
Response time	Parallel beam coded version, 38 ms ²⁾

 $^{^{1)}}$ 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
eCl@ss 10.0	27270910

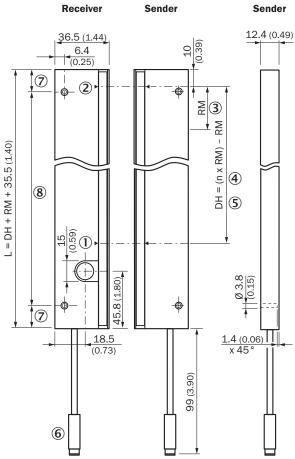
²⁾ With resistive load.

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-Sxxxxxxx2xxx

Slim, with stabilizer



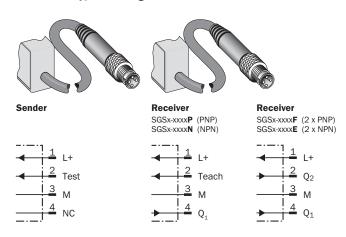
- ① First beam
- ② Last beam
- ③ Beam separation (RM)
- ④ Number of beams (n)
- ⑤ Detection height (DH)
- © Connection
- ⑦ Same distance
- See table (hole spacing stabilizer)

Hole spacing stabilizer			
Monitoring height (MH)	Number of holes	Distance between the holes	Distance first hole to the last hole

Hole spacing stabilizer			
0120	2	160	160
0280	2	320	320
0440	2	320	320
0600	3	320	640
0760	3	320	640
0920	4	320	960
1080	4	320	960
1240	5	320	1280
1400	5	320	1280

Connection type and diagram

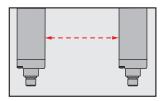
Connection type and diagram



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

Recommended accessories

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

	Brief description	Туре	Part no.
Plug connector	rs and cables		
	Head A: female connector, M12, 4-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 2 m	YF2A14- 020VB3XLEAX	2096234

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For us, that is "Sensor Intelligence."

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