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DATA SHEET

SGS4-F092P7PC1W02

SLG
Automation light grids

SICK Sensor Intelligence

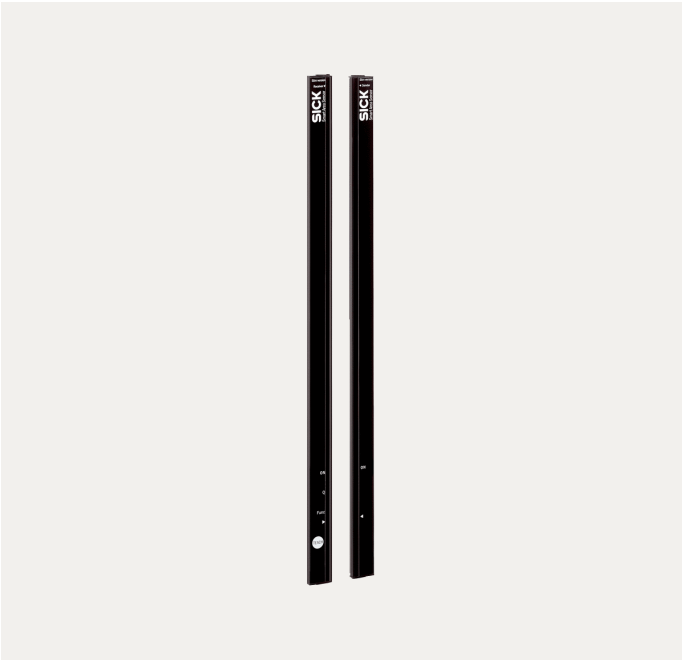


Illustration may differ

AUTOMATION LIGHT GRIDS

SGS4-F092P7PC1W02

ORDERING INFORMATION

Type	part no.
SGS4-F092P7PC1W02	1216546

Further device versions and accessories at www.sick.com/SLG



DETAILED TECHNICAL DATA

FEATURES

Sensor principle	Sender/receiver
Minimum detectable object (MDO)	Parallel beam, 45 mm
Beam separation	40 mm
Optical light exit	Flat
Number of beams	24
Detection height	920 mm
Parameterization	None
Cross beam/parallel beam	Parallel beam active
Output 1	Output 1 inactive, if light beam interrupted
Muting function	Muting function deactivated
Automatic teach	Automatic teach inactive
Alignment aid	Without alignment aid

MECHANICS/ELECTRONICS

Light source	Infrared light
Wave length	950 nm
Supply voltage V_s	DC24 V, $\pm 20\%$
Power consumption receiver	$\leq 70\text{ mA}$
Ripple	$< 5\text{ V}_{pp}$
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 992.4 mm x 8.2 mm
Connection type	Cable with M8 male connector, 4-pin
Housing material	PMMA
Display	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	Without 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.

²⁾ With resistive load.

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

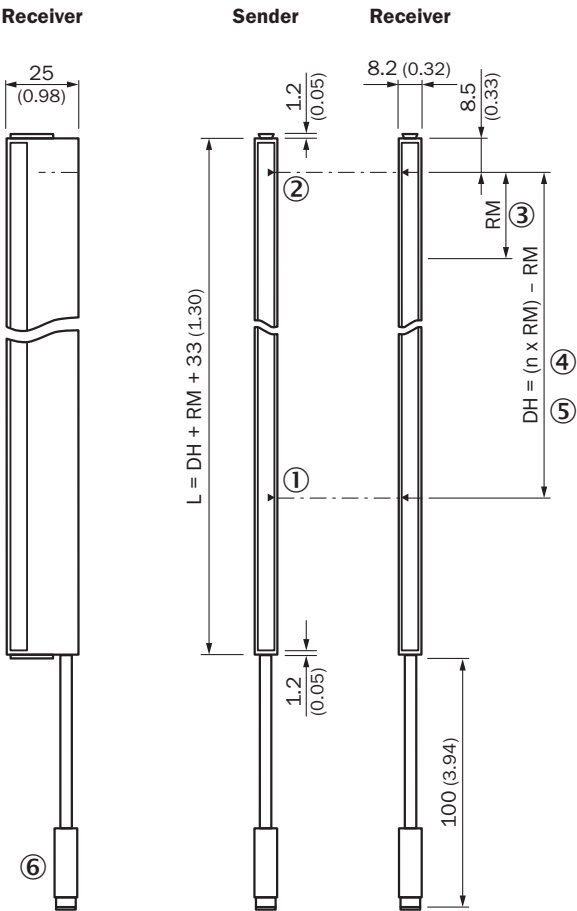
¹⁾ Sunlight.

CERTIFICATES

EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓
China RoHS	✓
Information according to Art. 3 of Data Act (Regulation EU 2023/2854)	✓

DIMENSIONAL DRAWING SXX-FXXXXXXX1XXX

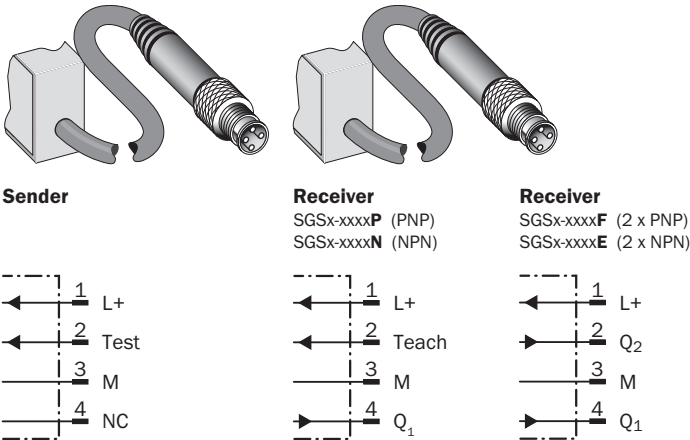
Flat, without stabilizer



Dimensions in mm (inch)

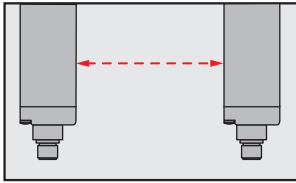
- ① First beam
- ② last beam
- ③ beam separation (RM)
- ④ number of beams (n)
- ⑤ detection height (DH)
- ⑥ Connection

CONNECTION TYPE AND DIAGRAM



SPECIFIC FEATURES

Optical synchronization



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

SLIM & FLAT



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

Further information as well as suitable accessories, example applications and downloads such as CAD dimensional models, operating instructions and software can be found at www.sick.com/1216546



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SICK AT A GLANCE

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SICK combines sensor intelligence with industry expertise and certified consulting services. We provide the ideal foundation for scalable as well as tailor-made automation solutions and create added value along the entire value chain. Our close partnerships with our customers are more than just a promise: Together, we optimize productivity, improve quality, protect health and safety, and help build a sustainable future. All with empathy and trust.

Since 1946, we have been developing innovative technologies with passion and a pioneering spirit. With a global network in around 40 countries, SICK has a global presence and is always close by. The company's headquarters are located in Waldkirch near Freiburg, Germany. Our customers benefit from our understanding of both local and global requirements, which enables us to deliver tailor-made solutions

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