

# SAS4-S044P3TS2W0F

**SWITCHING AUTOMATION LIGHT GRIDS** 





#### Ordering information

Туре	Part no.
SAS4-S044P3TS2W0F	1220838

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 <sup>1)</sup>
Beam separation	40 mm
Optical light exit	Slim
Number of beams	12
Detection height	440 mm
Parameterization	None
Cross beam/parallel beam	Cross beam active
Output 1	Output 1 inactive, if light beam interrupted
Automatic teach	Automatic teach active
Alignment aid	With alignment aid
Muting function	Muting function deactivated

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

#### Mechanics/electronics

Light source	Infrared light
Wave length	950 nm
Supply voltage $V_s$	DC24 V, ± 20 %
Power consumption receiver	≤ 70 mA
Output current I <sub>max.</sub>	100 mA
Output load, capacitive	100 nF
Output load, Inductive	1 H
Initialization time	1 s
Switching output	PNP
Inputs	Teach-in input (receiver) Test input (sender)

	HIGH = 10 V 30 V / LOW = < 5 V
Dimensions (W x H x D)	36.5 mm x 512.4 mm x 12.4 mm
Connection type	Cable with M12 male connector, 4-pin
Housing material	PMMA
Indication	LED
Synchronization	Optical
Enclosure rating	IP65
Circuit protection	U <sub>V</sub> connections, reverse polarity protected Output Q short-circuit protected Interference pulse suppression
Protection class	III
Weight	60 g
Pulse frequency	500 kHz
Aluminum stabilizer	With stabilizer

#### Performance

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

 $<sup>^{1)}\,\</sup>mathrm{No}$  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 <sup>1)</sup> Indirect: 150,000 lx
Ambient operating temperature	-25 °C +55 °C
Ambient temperature, storage	-25 °C +70 °C

<sup>&</sup>lt;sup>1)</sup> Sunlight.

#### Classifications

ECLASS 5.0	27270910
ECLASS 5.1.4	27270910
ECLASS 6.0	27270910
ECLASS 6.2	27270910
ECLASS 7.0	27270910
ECLASS 8.0	27270910
ECLASS 8.1	27270910
ECLASS 9.0	27270910
ECLASS 10.0	27270910
ECLASS 11.0	27270910

<sup>&</sup>lt;sup>2)</sup> Aperture ± 10°.

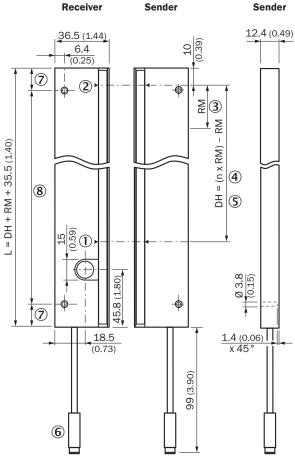
#### SWITCHING AUTOMATION LIGHT GRIDS

ECLASS 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



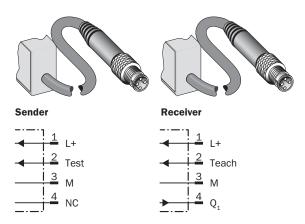
- ① First beam
- ② Last beam
- 3 Beam separation (RM)
- ④ Number of beams (n)
- ⑤ Detection height (DH)
- © Connection
- ⑦ Same distance
- See table (hole spacing stabilizer)

Hole spacing stabilizer			
Monitoring height (MH)	Number of holes	Distance between the holes	Distance first hole to the last hole
0120	2	160	160

Hole spacing stabilizer			
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

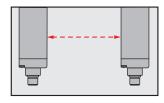
Connection type and diagram



#### 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.
Others			
	<ul> <li>Connection type head A: Female connector, M12, 4-pin, straight, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 2 m, 4-wire, PVC</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with chemicals</li> </ul>	YF2A14- 020VB3XLEAX	2096234

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We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is "Sensor Intelligence."

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