

SAS4-F028P3PS2T01

SWITCHING AUTOMATION LIGHT GRIDS





Ordering information

Туре	Part no.
SAS4-F028P3PS2T01	1108417

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

Illustration may differ



Detailed technical data

Features

Minimum detectable object (MDO)	Cross beam, 25 mm
Beam separation	40 mm
Optical light exit	Flat
Number of beams	8
Detection height	280 mm
Cross beam/parallel beam	Cross beam active
Output 1	Output 1 active, 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, ± 20 %
Power consumption receiver	≤ 70 mA
Output current I _{max.}	100 mA
Output load, capacitive	100 nF
Output load, Inductive	1 H
Initialization time	1s
Switching output	PNP
Inputs	Teach-in input HIGH = 10 V 30 V / LOW = < 5 V
Dimensions (W x H x D)	36.5 mm x 352.4 mm x 12.4 mm
Connection type	Cable with M8 male connector, 4-pin
Housing material	PMMA

Indication	LED
Circuit protection	U _V connections, reverse polarity protected Output Q short-circuit protected Interference pulse suppression
Protection class	III
Weight	40 g
Pulse frequency	500 kHz
Aluminum stabilizer	With stabilizer

Performance

Maximum range	4 m ¹⁾
Minimum range	Cross beam: ≥ 0.3 mm 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

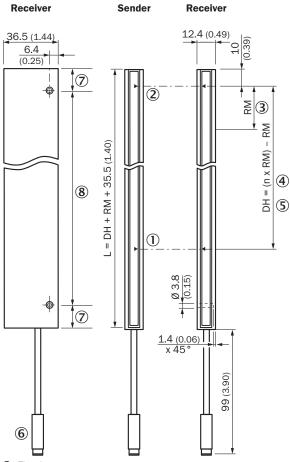
ECLASS 5.0	27270910
ECLASS 5.1.4	27270910
ECLASS 6.0	27270910
ECLASS 6.2	27270910
ECLASS 7.0	27270910
ECLASS 8.0	27270910
ECLASS 8.1	27270910
ECLASS 9.0	27270910
ECLASS 10.0	27270910
ECLASS 11.0	27270910
ECLASS 12.0	27270910
ETIM 5.0	EC002549
ETIM 6.0	EC002549
ETIM 7.0	EC002549
ETIM 8.0	EC002549
UNSPSC 16.0901	39121528

²⁾ Aperture ± 10°.

Dimensional drawing (Dimensions in mm (inch))

Sxx-Fxxxxxxx2xxx

Flat, with stabilizer

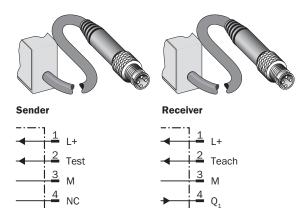


- ① First beam
- ② Last beam
- 3 Beam separation (RM)
- ④ Number of beams (n)
- ⑤ Detection height (DH)
- 6 Connection
- ⑦ Same distance
- See table (hole spacing stabilizer)

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

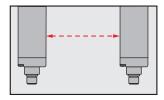
Connection type and diagram



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

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Recommended accessories

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

	Brief description	Туре	Part no.
Others			
	 Connection type head A: Female connector, M8, 4-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 2 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals 	YF8U14- 020VA3XLEAX	2095888

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