



Smart light grids SGS

SGS4-F060P3PS2T03



Model Name > [SGS4-F060P3PS2T03](#)
Part No. > [1209955](#)



At a glance

- Variable detection lengths from 600 mm up to 1,400 mm (in 160 mm increments)
- Simple teach-in setup via cable
- Optional parameter setting with teach-in button, no PC required
- Maximum range 10 m
- Response time 18 ms
- 25 mm or 45 mm MDO possible
- Highly immune to sunlight at 150,000 lx
- Small blind zone < 11 mm

Your benefits

- Small, slim and sleek design enables easy integration into applications
- Slim and flat models offer flexible mounting options and optimize shelf/bin space while reducing damage
- Customized preset configurations or set parameters via one-touch teach-in with no PC
- Optical synchronization eliminates the need to lay cables, saving time
- Optional: Capacitive teach-in button and LEDs make commissioning easier for complex solutions
- Auto-teach and auto-muting enable Plug & Play. And, an alignment aid and “Click & Go” provide faster installation.



Features

| | |
|----------------------------------|---|
| Technology: | Sender/receiver |
| Task: | Switching light grid |
| Minimum detectable object (MDO): | Multiple scan: ≥ 25 mm ¹⁾ |
| Beam separation: | 40 mm |
| Optical light exit: | Flat |

| | |
|---------------------------|--|
| Number of beams: | 16 |
| Detection height: | 600 mm |
| Cross beam/parallel beam: | Cross beam active |
| Output 1: | Output 1 inactive, if light beam interrupted |
| Automatic teach: | Automatic teach inactive |
| Alignment aid: | Without alignment aid |
| Muting function: | Muting function inactive |
| Configuration: | Teach button with configuration software |

¹⁾ 25 mm MDO limited detection area

Performance

| | |
|----------------|--|
| Maximum range: | 4 m ¹⁾ |
| Minimum range: | Multiple scan: ≥ 0.3 mm ²⁾ |
| Response time: | Multiple scan: ≥ 57 ms ³⁾ |
| Working range: | 3 m |

¹⁾ No reserve for environmental issue and deterioration of the diode ²⁾ Aperture $\pm 10^\circ$ ³⁾ With resistive load

Interfaces

| | |
|------------------|--------------------------------------|
| Output type: | 1 x PNP |
| Inputs: | Teach input |
| Connection type: | Short cable with connector M8, 4-pin |

Mechanics/electronics

| | |
|------------------------------------|---|
| Wave length: | IR 950 nm |
| Supply voltage Vs: | DC 24 V _{...} , ± 20 % ¹⁾ |
| Power consumption sender: | 136 mA ²⁾ |
| Power consumption receiver:: | 70 mA ^{3) 4)} |
| Ripple: | < 5 Vpp |
| Output current I _{max.} : | 100 mA |
| Output load capacitive: | 100 nF |
| Output load inductive: | 1 H |
| Initialization time: | 1 s |
| Dimensions (W x H x D): | 25 mm x 672.4 mm x 8 mm |
| Housing material: | PMMA |
| Indication: | LED |
| Synchronization: | Optical |
| Enclosure rating: | IP 65 |
| Circuit protection: | Output Q short-circuit protected, Interference suppression, VS connections reverse-polarity protected |
| Weight: | 80 g |
| Power consumption: | 136 mA ⁵⁾ |
| Aluminum stabilizer: | With stabilizer |
| Switching frequency: | 500 kHz |

¹⁾ Limit values ^{2) 3) 4) 5)} Without load

Ambient data

| | |
|-------------------|--------------|
| Protection class: | III |
| EMC: | EN 60947-5-2 |

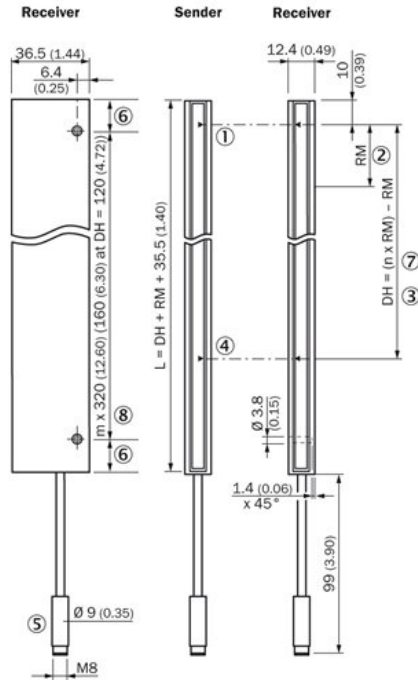
Ambient temperature:
 Ambient light safety:
 Vibration resistance:
 Shock load:

Operation: -25 ... 55 °C, Storage: -25 ... 70 °C
 Direct: $\geq 100,000$ lx, Indirect: $\geq 150,000$ lx ¹⁾
 5 g, 10 Hz ... 55 Hz (IEC 68-2-6)
 10 g/DIN EN 60068-2-29/16 ms

¹⁾ Sunlight

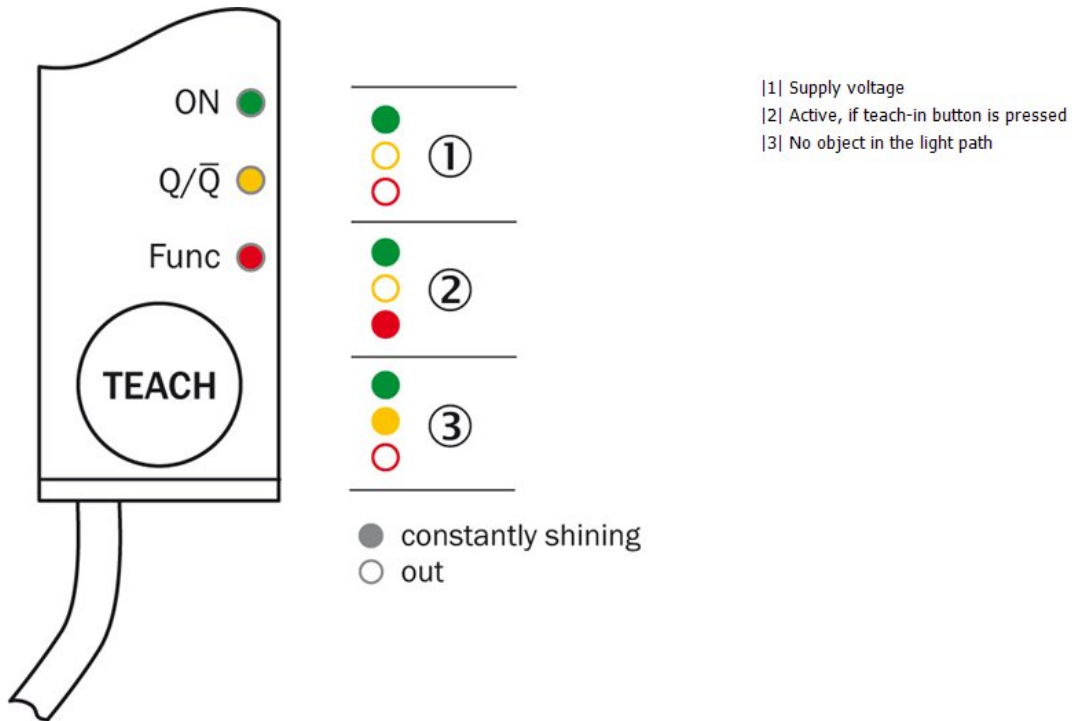
Dimensional drawing

Flat, with stabilizer

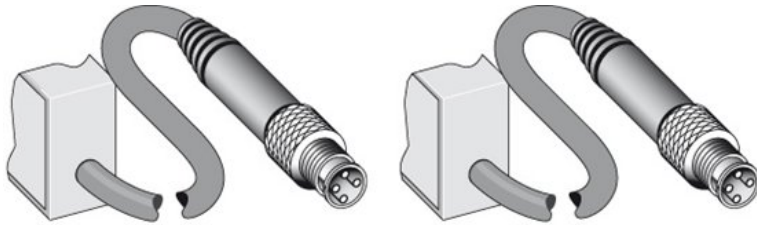


- |1| Last beam
- |2| Beam separation RM
- |3| DH - Detection height (n x 40 mm) - RM
- |4| First beam
- |5| Connection
- |6| Same distance
- |7| n = beam
- |8| m = mounting hole

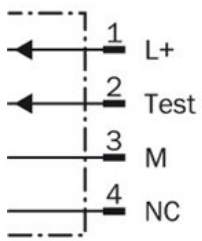
Adjustments



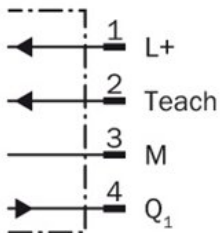
Anschlussart und -schema



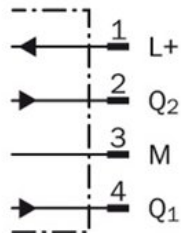
Sender



Receiver PNP/NPN



Receiver 2 x PNP/2 x NPN



Australia

Phone +61 3 9457 0600
1800 334 802 – tollfree
E-Mail sales@sick.com.au

Belgium/Luxembourg

Phone +32 (0)2 466 55 66
E-Mail info@sick.be

Brasil

Phone +55 11 3215-4900
E-Mail sac@sick.com.br

Canada

Phone +1 905 771 14 44
E-Mail information@sick.com

Ceská Republika

Phone +420 2 57 91 18 50
E-Mail sick@sick.cz

China

Phone +86 4000 121 000
E-Mail info.china@sick.net.cn
Phone +852-2153 6300
E-Mail ghk@sick.com.hk

Danmark

Phone +45 45 82 64 00
E-Mail sick@sick.dk

Deutschland

Phone +49 211 5301-301
E-Mail kundenservice@sick.de

España

Phone +34 93 480 31 00
E-Mail info@sick.es

France

Phone +33 1 64 62 35 00
E-Mail info@sick.fr

Great Britain

Phone +44 (0)1727 831121
E-Mail info@sick.co.uk

India

Phone +91-22-4033 8333
E-Mail info@sick-india.com

Israel

Phone +972-4-6801000
E-Mail info@sick-sensors.com

Italia

Phone +39 02 27 43 41
E-Mail info@sick.it

Japan

Phone +81 (0)3 3358 1341
E-Mail support@sick.jp

Magyarország

Phone +36 1 371 2680
E-Mail office@sick.hu

Nederlands

Phone +31 (0)30 229 25 44
E-Mail info@sick.nl

Norge

Phone +47 67 81 50 00
E-Mail austefjord@sick.no

Österreich

Phone +43 (0)22 36 62 28 8-0
E-Mail office@sick.at

Polska

Phone +48 22 837 40 50
E-Mail info@sick.pl

România

Phone +40 356 171 120
E-Mail office@sick.ro

Russia

Phone +7-495-775-05-30
E-Mail info@sick.ru

Schweiz

Phone +41 41 619 29 39
E-Mail contact@sick.ch

Singapore

Phone +65 6744 3732
E-Mail admin@sicksgp.com.sg

Slovenija

Phone +386 (0)1-47 69 990
E-Mail office@sick.si

South Africa

Phone +27 11 472 3733
E-Mail info@sickautomation.co.za

South Korea

Phone +82 2 786 6321/4
E-Mail info@sickkorea.net

Suomi

Phone +358-9-25 15 800
E-Mail sick@sick.fi

Sverige

Phone +46 10 110 10 00
E-Mail info@sick.se

Taiwan

Phone +886-2-2375-6288
E-Mail sales@sick.com.tw

Türkiye

Phone +90 (216) 528 50 00
E-Mail info@sick.com.tr

United Arab Emirates

Phone +971 (0) 4 8865 878
E-Mail info@sick.ae

USA/México

Phone +1(952) 941-6780
1 800-325-7425 – tollfree
E-Mail info@sickusa.com

More representatives and agencies
at www.sick.com