



Standard automation light grids FLG

FLG4-20018011



Model Name > [FLG4-20018011](#)
Part No. > [6049136](#)



Illustration may differ

At a glance

- Dynamic or static operating mode, switchable
- Simple adjustment
- Adjustable sensitivity
- Adjustable pushbutton lock
- Rugged metal housing
- Adjustable pulse lengthening
- Switchable NO/NC

Your benefits

- Simple installation and alignment due to sender and receiver in one housing
- The adjustable pushbutton lock protects against unwanted changes to parameters and manipulation during operation
- The device's adjustable sensitivity, operating mode and pulse lengthening features enable individual parameter changes to fit the requirements of your application
- Also available as an one side open version for simple integration into your application environment
- Large monitoring area, so only one device is required for monitoring small and large parts
- Using the sensitivity setting, it is possible to hide falling debris and only recognize objects that are relevant to detect



Features

Version:	Close
Technology:	Sender/receiver
Task ¹⁾ :	Switching light grid
Minimum detectable object (MDO):	≤dynamic: 4 mm ≤static: 6 mm
Beam separation:	4 mm
Output function:	Light/dark switching adjustable by means of rotary switch

¹⁾ Dynamic or static function adjustable by means of rotary switch

Performance

Response time:	< 0.1 ms
Detection area (W x H):	180 mm x 200 mm

Interfaces

Connection type: Connector M12, 4-pin

Mechanics/electronics

Wave length: 880 nm
Supply voltage V_s ¹⁾: DC 18 V ... 30 V
Power consumption ²⁾: < 150 mA
Ripple: < 10 %
Output current $I_{max.}$: 100 mA
Initialization time: 0.3 s
Dimensions (W x H x D): 242 mm x 230 mm x 25 mm
Housing material: Aluminum, painted
Indication: LED
Enclosure rating: IP 65
Circuit protection: Output Q short-circuit protected
Interference suppression
VS connections reverse-polarity protected

Weight: 1 kg
Switching frequency: $\leq 5,000$ Hz
Off delay: 0 s ... 5 s ³⁾

¹⁾ Limit values, reverse-polarity protected, operation in short-circuit protected network: max. 8 A ²⁾ Without load ³⁾ Adjustable

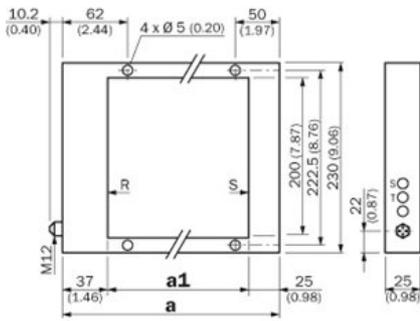
Ambient data

Protection class: III
EMC: EN 60947-5-2
Ambient temperature ¹⁾: Operation: 0 ... 60 °C
Storage: -20 ... 80 °C

Ambient light safety: Sunlight: 10,000 lx
Vibration resistance: (EN 60068-2-6)
Shock load: EN 60068-2-27

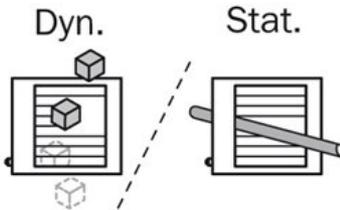
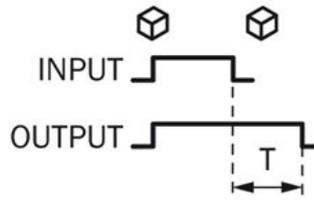
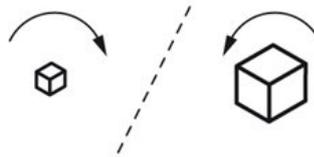
¹⁾ In static mode: constant temperature around teaching point will be assumed

Dimensional drawing

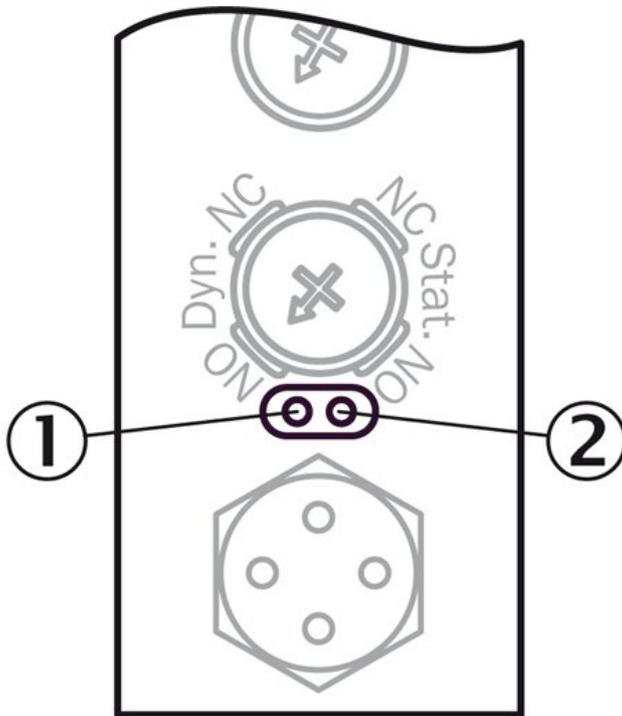


	a	a1
FLGx-200120xx	182 (7.17)	120 (4.72)
FLGx-200180xx	242 (9.53)	180 (7.09)
FLGx-200250xx	312 (12.28)	250 (9.84)

Adjustments



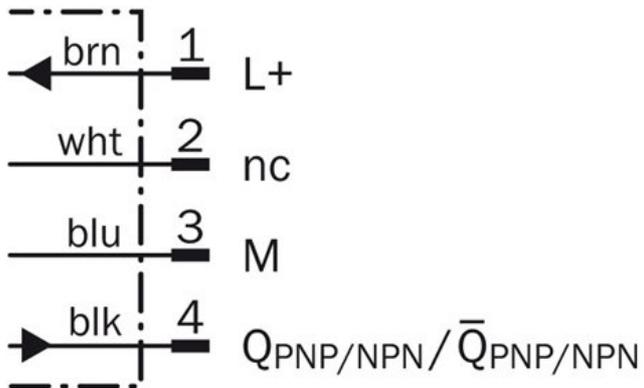
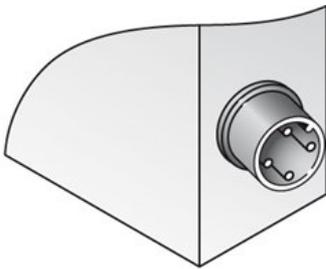
LED display



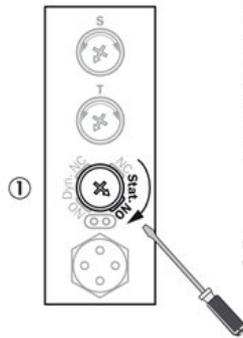
[1] Yellow LED: Output state

[2] Red LED: Error or key lock funktion active (blinking)

Connection type and diagram



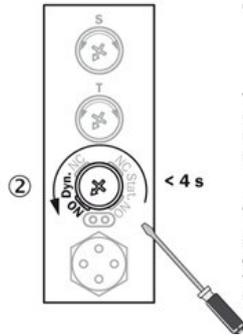
Setting the key lock



Setting key lock

Locking:
After the last setting, the frame waits 15 minutes then locks the potentiometer. When the potentiometers are locked, the red LED flashes every time you turn any button.

Unlocking:
① To unlock the potentiometers, turn the mode button on the "Stat. NO" position.

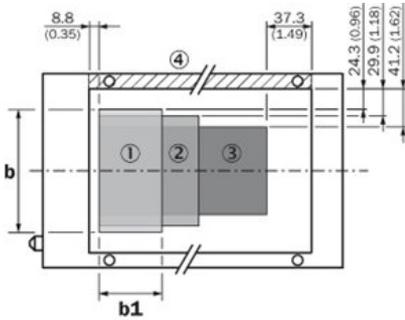


② Turn in less than 4 seconds, on the "Dyn. NO" position.

The potentiometers are then unlocked and the settings are updated with the current position of the potentiometers.

Notice:
If the mode button is already in the "Stat. NO" position, change mode previously and then apply the standard unlocking procedure.

Limited detection area



Dimensions in mm (inch)

[4] Side is missing in open version

	b	b1
① FLG2-xxx120xx	151.4 (5.96)	73.9 (2.91)
② FLG2-xxx180xx	140.2 (5.52)	133.9 (5.27)
③ FLG2-xxx250xx	117.6 (4.63)	203.9 (8.03)

All dimensions in mm (inch)

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