



## Switching 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 <sup>1)</sup> :	Switching light grid
Minimum detectable object (MDO):	Dynamic: 4 mm Statiic: 6 mm
Beam separation:	4 mm
Output function:	Light/dark switching adjustable by means of rotary switch

<sup>1)</sup> 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

---

Electrical connection: Connector M12, 4-pin

## Mechanics/electronics

---

Wave length: 880 nm  
Supply voltage  $V_s$  <sup>1)</sup>: DC 18 V ... 30 V  
Residual 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 <sup>2)</sup>

<sup>1)</sup> Limit values, reverse-polarity protected, operation in short-circuit protected network: max. 8 A <sup>2)</sup> Adjustable

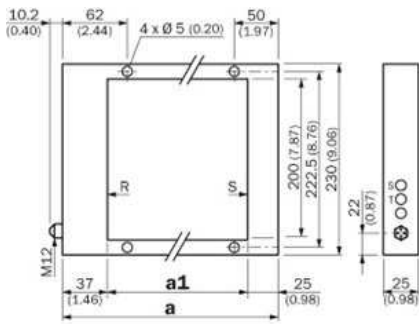
## Ambient data

---

Protection class: III  
EMC: EN 60947-5-2  
Ambient temperature <sup>1)</sup>: 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

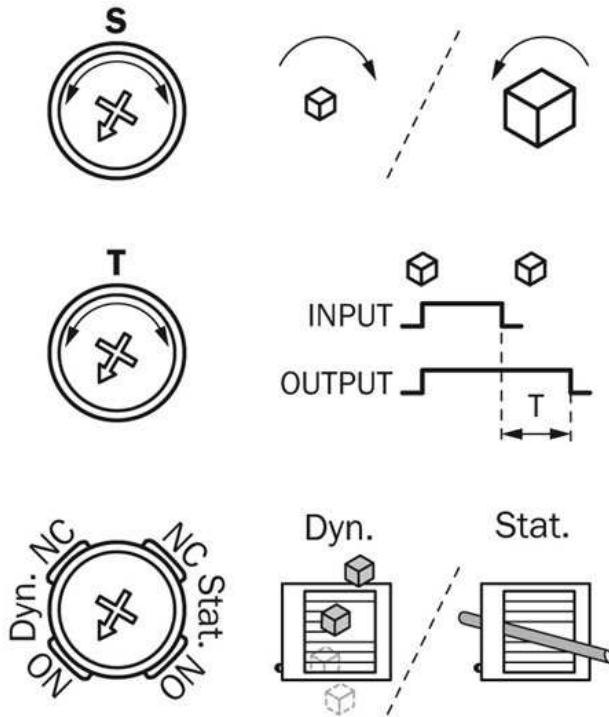
<sup>1)</sup> In static mode: constant temperature around teaching point will be assumed

## Dimensional drawing

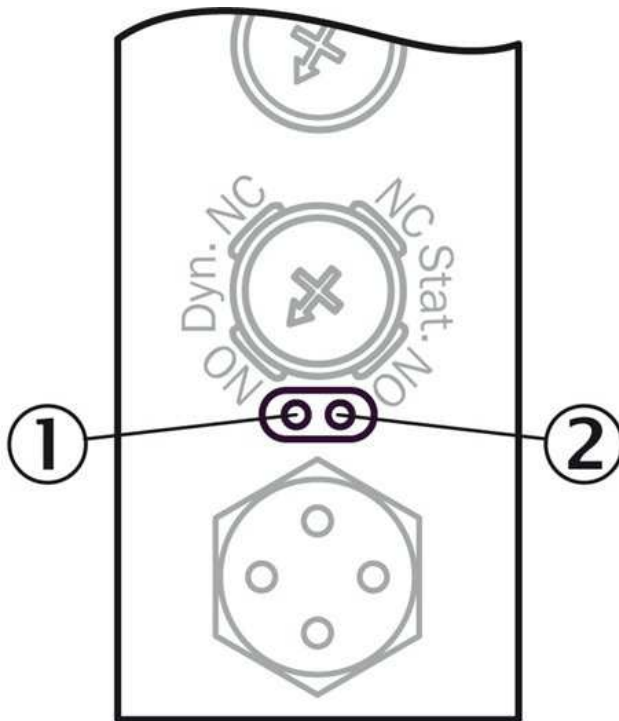


	a	a1
<b>FLGx-200120xx</b>	182 (7.17)	120 (4.72)
<b>FLGx-200180xx</b>	242 (9.53)	180 (7.09)
<b>FLGx-200250xx</b>	312 (12.28)	250 (9.84)

## Adjustments



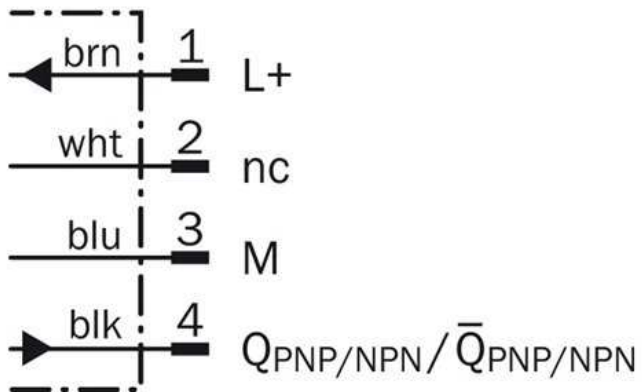
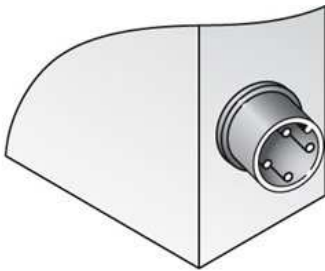
## LED display



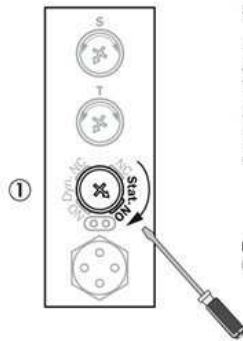
|1| Yellow LED: Output state

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

## Connection type and diagram



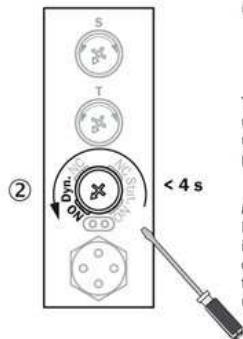
## Setting the key lock



### 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.

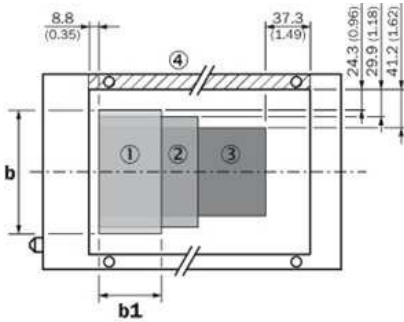


② Turn in less than 4 seconds, on the "Dyn. NO" position.

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 33 48 02 – 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 marketing@sick.com.br

**Canada**

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

**Česká 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 info@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 +972-4-6881000  
E-Mail info@sick-sensors.com

**Italia**

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

**Japan**

Phone +81 (0)3 5309 2112  
E-Mail support@sick.jp

**Magyarország**

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

**Nederland**

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

**Norge**

Phone +47 67 81 50 00  
E-Mail sick@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 sales.gsg@sick.com

**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 88 65 878  
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](http://www.sick.com)