



## Switching automation light grids FLG

FLG2-20018011



**Model Name** > **FLG2-20018011**  
**Part No.** > **6049333**



*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) <sup>2)</sup> :	Dynamic: 2 mm Statiic: 6 mm
Beam separation:	2 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 <sup>2)</sup> 2 mm MDO in limited detection area

**Performance**

Response time:	< 0.1 ms
Detection area (W x H) <sup>1)</sup> :	180 mm x 200 mm

<sup>1)</sup> 2 mm MDO in limited detection area

## Interfaces

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Electrical connection: Connector M12, 4-pin

## Mechanics/electronics

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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

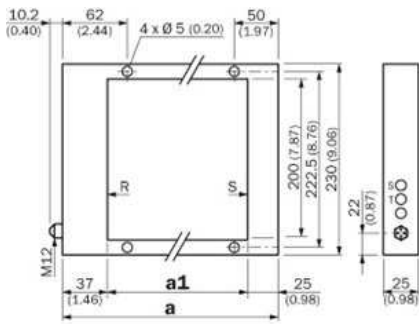
## Ambient data

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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

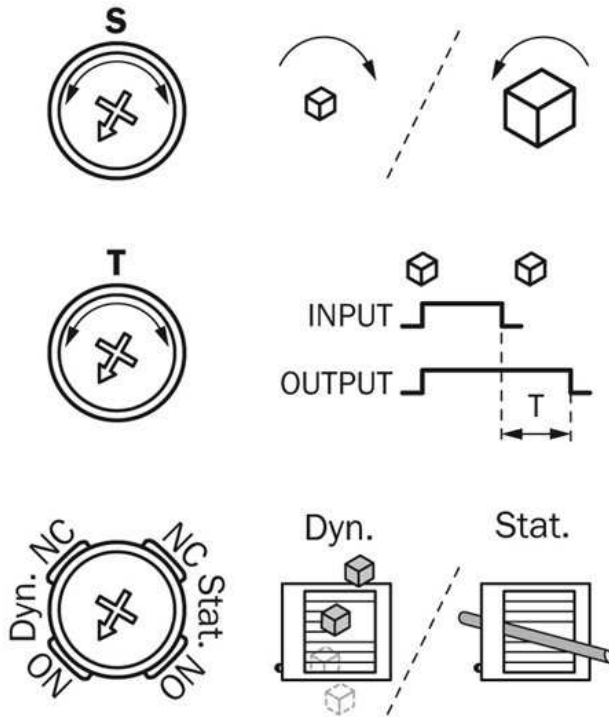
<sup>1)</sup> In static mode: constant temperature around teaching point will be assumed

## Dimensional drawing

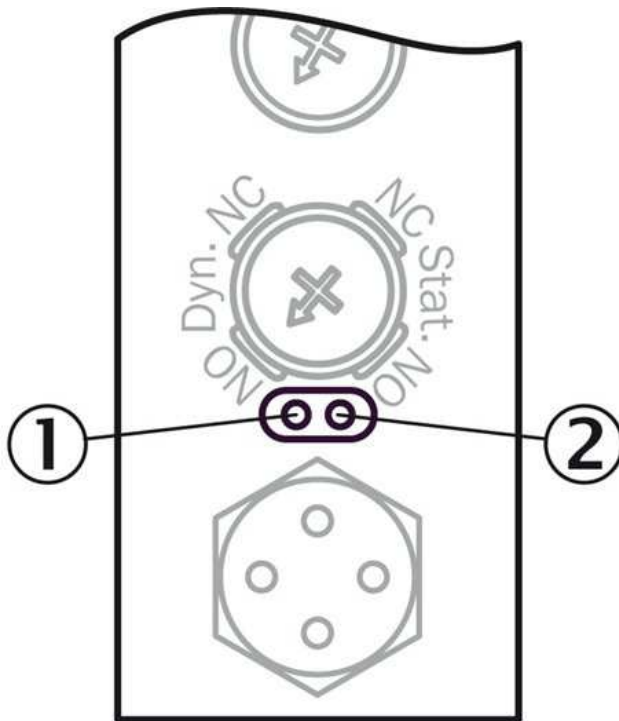


	a	a1
<b>FLGx-200120xx</b>	182 (7.17)	120 (4.72)
<b>FLGx-200180xx</b>	242 (9.53)	180 (7.09)
<b>FLGx-200250xx</b>	312 (12.28)	250 (9.84)

## Adjustments



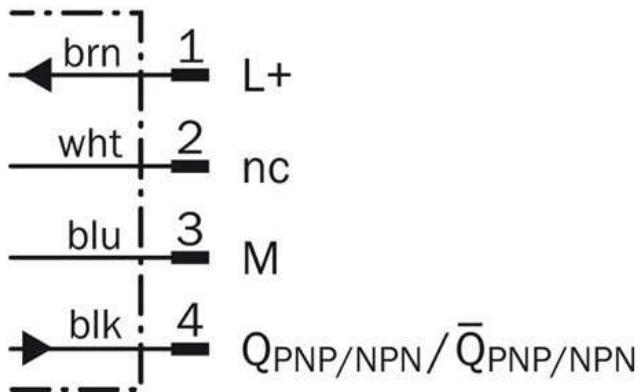
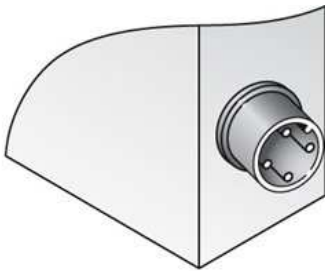
## LED display



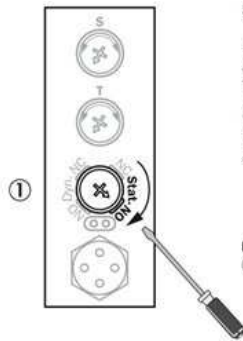
|1| Yellow LED: Output state

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

## Connection type and diagram



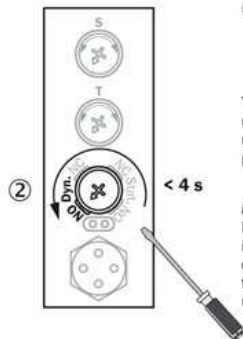
## Setting the key lock



### 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.

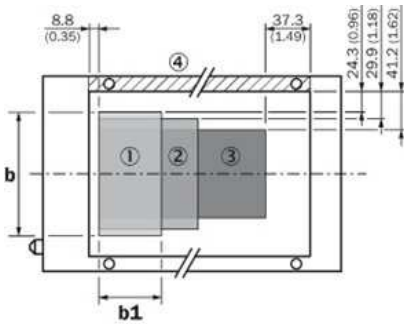


② Turn in less than 4 seconds, on the "Dyn. NO" position.

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>b</b>	<b>b1</b>
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)

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