



## Standard automation light grids FLG

FLG2-20012011



**Model Name** > [FLG2-20012011](#)  
**Part No.** > [6049334](#)



*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<br>≤static: 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> : | 120 mm x 200 mm |

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

## Interfaces

Connection type: Connector M12, 4-pin

## Mechanics/electronics

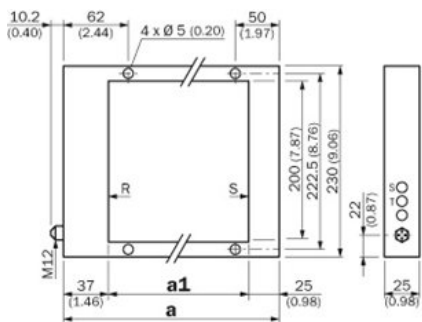
Wave length: 880 nm  
Supply voltage  $V_s$  <sup>1)</sup>: DC 18 V ... 30 V  
Power consumption <sup>2)</sup>: < 150 mA  
Ripple: < 10 %  
Output current  $I_{max.}$ : 100 mA  
Initialization time: 0.3 s  
Dimensions (W x H x D): 182 mm x 230 mm x 25 mm  
Housing material: Aluminum, painted  
Indication: LED  
Enclosure rating: IP 65  
Circuit protection: Output Q short-circuit protected  
Interference suppression  
VS connections reverse-polarity protected  
Weight: 1.12 kg  
Switching frequency:  $\leq 5,000$  Hz  
Off delay: 0 s ... 5 s <sup>3)</sup>

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

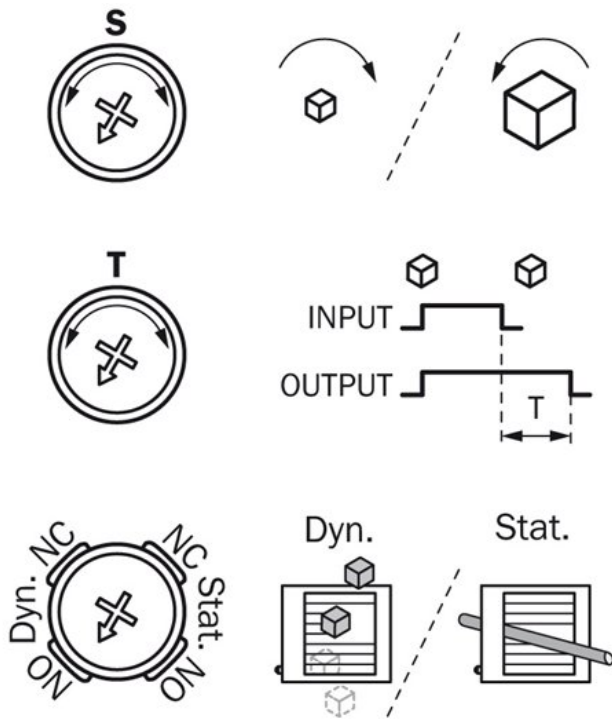
## Ambient data

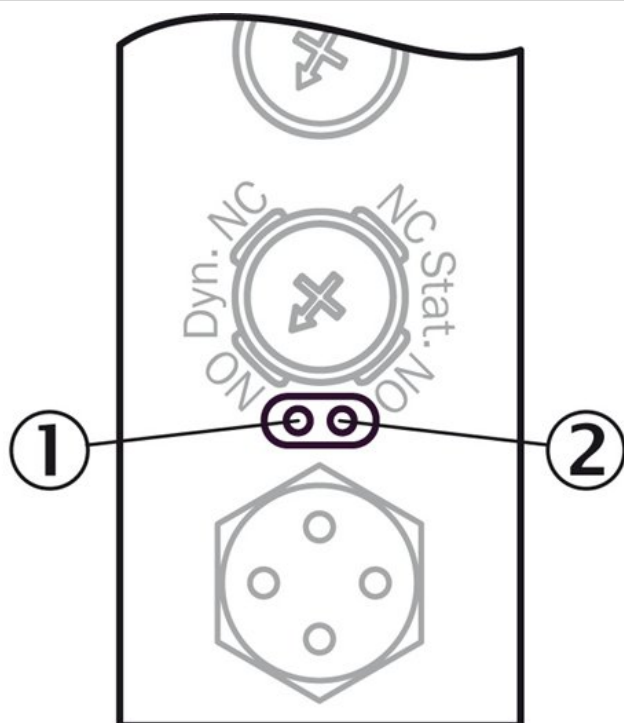
Protection class: III  
EMC: EN 60947-5-2  
Ambient temperature <sup>1)</sup>: Operation: 0 ... 60 °C  
Storage: -20 ... 80 °C  
Ambient light safety: Sunlight: 10,000 lx  
Vibration resistance: (EN 60068-2-6)  
Shock load: EN 60068-2-27

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



|                      | <b>a</b>    | <b>a1</b>  |
|----------------------|-------------|------------|
| <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) |

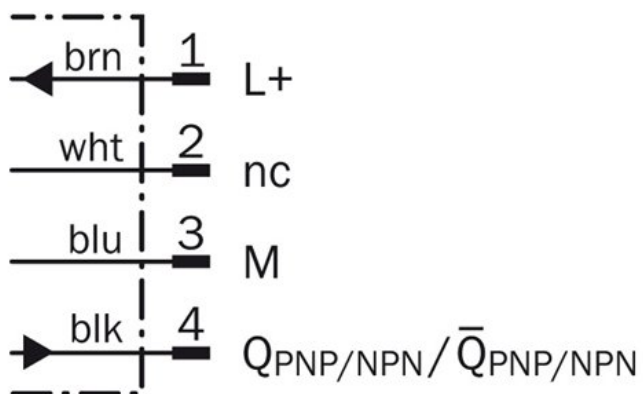
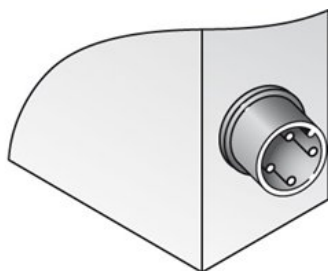




|1| Yellow LED: Output state

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

#### Connection type and diagram



Setting the key lock

①

**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

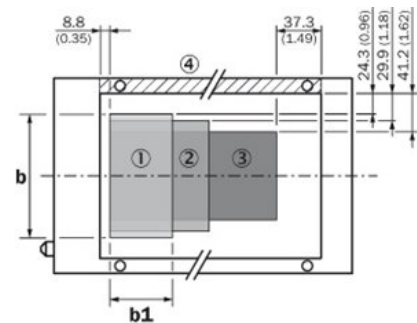
< 4 s

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



All dimensions in mm (inch)

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 ② FLG2-xxx180xx | 140.2 (5.52) | 133.9 (5.27) |
| ③ FLG2-xxx250xx   | 117.6 (4.63) | 203.9 (8.03) |

|4| Side is missing in open version

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