



FLG4-20012021

FLG

SWITCHING AUTOMATION LIGHT GRIDS

**SICK**  
Sensor Intelligence.



Illustration may differ



### Ordering information

Type	Part no.
FLG4-20012021	6050067

Other models and accessories → [www.sick.de/FLG](http://www.sick.de/FLG)

### Detailed technical data

#### Features

<b>Version</b>	Open
<b>Technology</b>	Sender/receiver
<b>Minimum detectable object (MDO)</b>	Dynamic: 4 mm Static: 6 mm
<b>Beam separation</b>	4 mm
<b>Output function</b>	Light/dark switching adjustable by means of rotary switch

#### Performance

<b>Detection area (W x H)</b>	120 mm x 200 mm
<b>Response time</b>	< 0.1 ms

#### Interfaces

<b>Switching output</b>	PNP/NPN (Q and /Q)
<b>Connection type</b>	M12, 4-pin male connector

#### Mechanics/electronics

<b>Wave length</b>	880 nm
<b>Supply voltage <math>V_s</math></b>	DC 18 V ... 30 V <sup>1)</sup>
<b>Ripple</b>	< 10 %
<b>Output current <math>I_{max}</math></b>	≤ 100 mA
<b>Off delay</b>	0 s ... 5 s <sup>2)</sup>
<b>Initialization time</b>	0.3 s
<b>Dimensions (W x H x D)</b>	182 mm x 230 mm x 25 mm
<b>Housing material</b>	Aluminum, painted
<b>Indication</b>	LED
<b>Enclosure rating</b>	IP 65

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

<sup>2)</sup> Adjustable.

<b>Circuit protection</b>	U <sub>V</sub> connections, reverse polarity protected, Output Q short-circuit protected, Interference pulse suppression
<b>Weight</b>	≥ 1.12 kg
<b>Switching frequency</b>	≤ 5,000 Hz

1) Limit values, reverse-polarity protected, operation in short-circuit protected network: max. 8 A.

2) Adjustable.

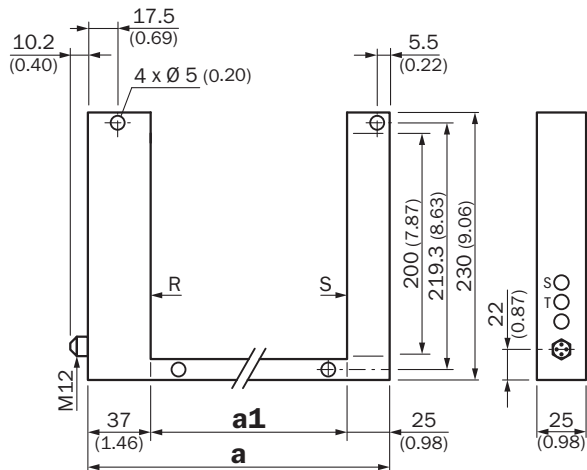
**Ambient data**

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

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

**Dimensional drawing** (Dimensions in mm (inch))

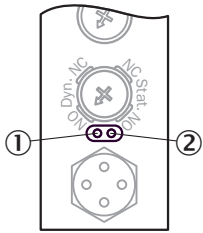
FLGx-200xxx2x



	<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)

## Adjustments

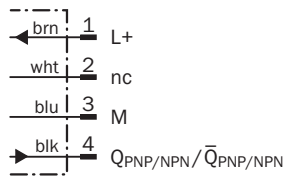
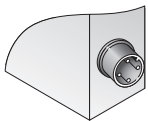
Indication LED



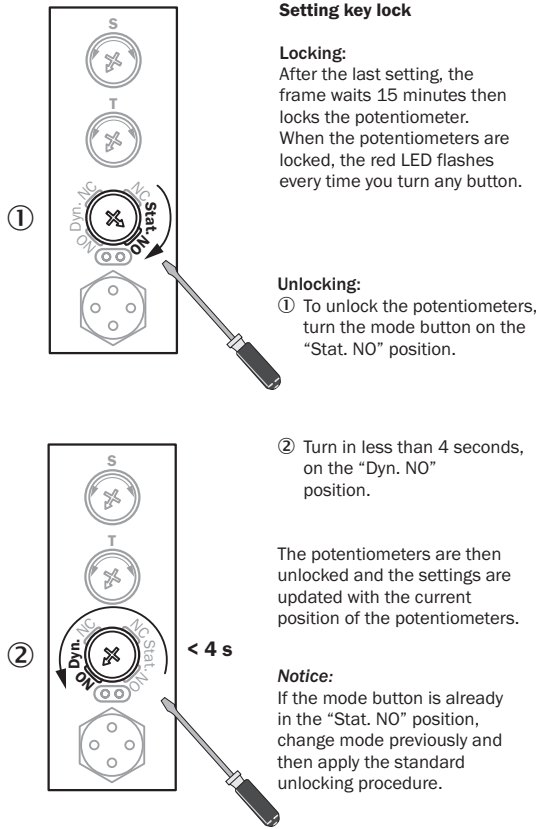
- ① Yellow LED: status output
- ② Red LED: error or button lock active (blinking)

## Connection type and diagram

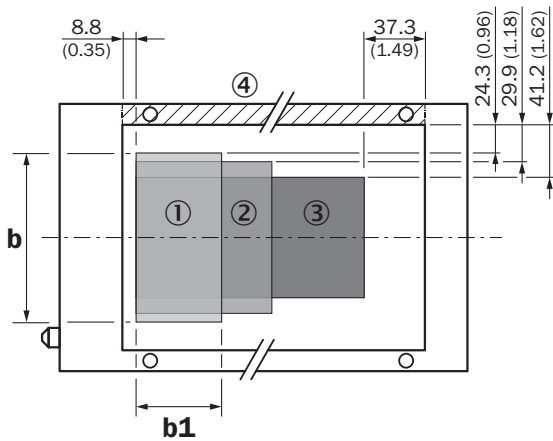
M12, 4-pin male connector



Concept of operation



Diagramm



Dimensions in mm (inch)


	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)

④ Side is missing in open version

### Recommended accessories

Other models and accessories → [www.sick.de/FLG](http://www.sick.de/FLG)

	Brief description	Type	Part no.
Plug connectors and cables			
	Head A: female connector, M12, 4-pin, straight Head B: cable Cable: PVC, unshielded, 5 m	DOL-1204-G05M	6009866

## SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

## WORLDWIDE PRESENCE:

Contacts and other locations –[www.sick.com](http://www.sick.com)