



# HLG2-050F811

HLG

SWITCHING AUTOMATION LIGHT GRIDS

**SICK**  
Sensor Intelligence.



### Ordering information

Type	Part no.
HLG2-050F811	1029853

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



### Detailed technical data

#### Features

<b>Technology</b>	Sender/receiver
<b>Minimum detectable object (MDO)</b>	Parallel beam, 2 mm
<b>Beam separation</b>	2 mm
<b>Number of beams</b>	≥ 26
<b>Detection height</b>	50 mm

#### Performance

<b>Maximum range</b>	2 m
<b>Minimum range</b>	≥ 0 mm
<b>Working range</b>	1.5 m
<b>Response time</b>	Parallel beam ≥ 3 ms <sup>1)</sup>

<sup>1)</sup> With resistive load.

#### Interfaces

<b>Switching output</b>	2 x PNP (Q and /Q)
<b>Connection type</b>	Male connector M12, 8-pin

#### Mechanics/electronics

<b>Wave length</b>	950 nm
<b>Supply voltage V<sub>s</sub></b>	DC 15 V ... 30 V <sup>1)</sup>
<b>Power consumption sender</b>	< 100 mA <sup>1)</sup>
<b>Power consumption receiver</b>	> 100 mA <sup>1)</sup>
<b>Ripple</b>	< 5 V <sub>pp</sub>
<b>Output current I<sub>max.</sub></b>	≤ 100 mA
<b>Output load capacitive</b>	100 nF
<b>Output load inductive</b>	1 H

<sup>1)</sup> Typical value.

<sup>2)</sup> Q = active, if at least one beam is interrupted, /Q = active, if all of the beams are free.

<b>Initialization time</b>	0.8 s
<b>Dimensions (W x H x D)</b>	34 mm x 123 mm x 29 mm
<b>Housing material</b>	Aluminum
<b>Indication</b>	LED
<b>Synchronization</b>	Cable
<b>Enclosure rating</b>	IP 54
<b>Circuit protection</b>	U <sub>V</sub> connections, reverse polarity protected, Output Q short-circuit protected, Interference pulse suppression
<b>Weight</b>	≥ 135 g
<b>Front screen</b>	PMMA
<b>Output mode</b>	Q dark switching <sup>2)</sup>
<b>Teach-in input</b>	PNP

<sup>1)</sup> Typical value.

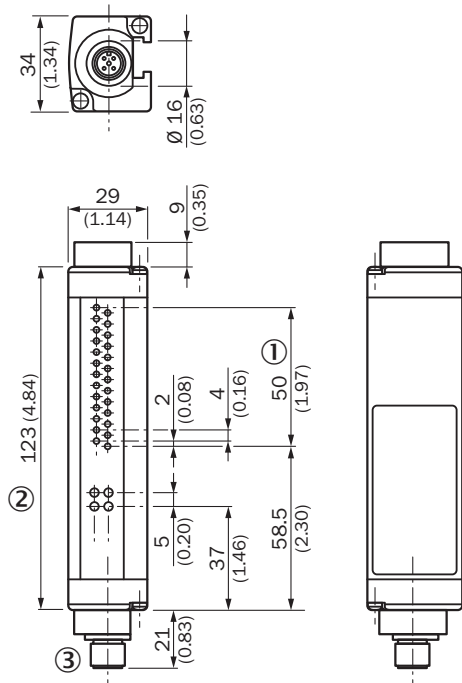
<sup>2)</sup> Q = active, if at least one beam is interrupted, /Q = active, if all of the beams are free.

### Ambient data

<b>Protection class</b>	III
<b>EMC</b>	EN 60947-5-2
<b>Ambient temperature</b>	Operation: -25 °C ... +55 °C Storage: -40 °C ... +70 °C
<b>Ambient light immunity</b>	Indirect: ≤ 50,000 lx <sup>1)</sup>
<b>Vibration resistance</b>	5 g, 10 Hz ... 55 Hz (IEC 68-2-6)
<b>Shock load</b>	10 g / DIN EN 60068-2-29 / 16 ms

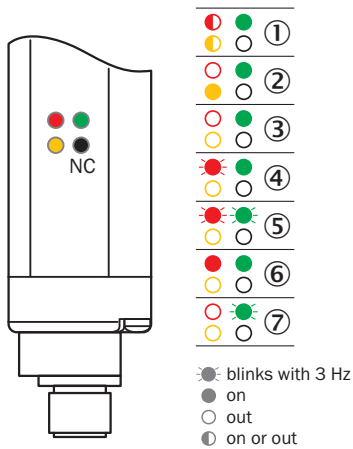
<sup>1)</sup> Sunlight.

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



- ① Detection height: 50 mm
- ② Status indicator/power on
- ③ Male connector M12, 8-pin

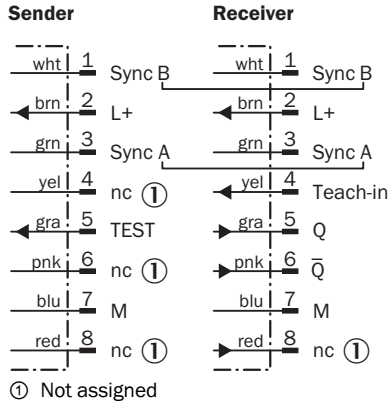
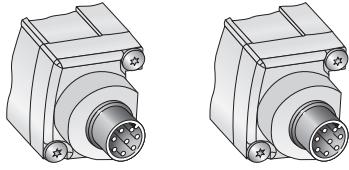
### Adjustments



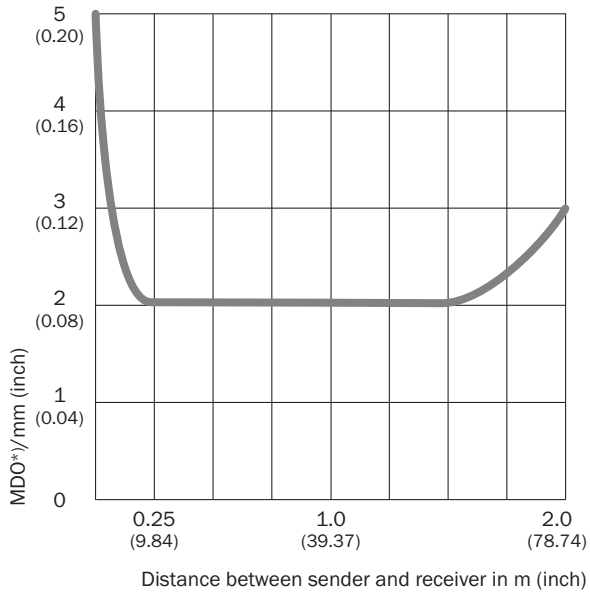
- ① Supply voltage
- ② No object in the light path
- ③ Object in the light path
- ④ Sync error
- ⑤ Weak received signal during teach-in
- ⑥ Device error
- ⑦ Teach-in process active

### Connection type and diagram

Sender Connector M12, 8-pin Receiver Connector M12, 8-pin







### Diagramm



\*) MDO: Minimum detectable object size measured in a direction parallel to the HLG

### Recommended accessories

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

	Brief description	Type	Part no.
<b>Terminal and alignment brackets</b>			
	4 pieces, Mounting kit 1, rotatable, swivel mount, plastic	BEF-2SMKEAKU4	2019649
<b>Adapters and distributors</b>			
	Male connector M12, 8-pin, straight, to 1 x female connector M12, 8-pin, straight and 1 x female connector M12, 8-pin, straight	SBO-02F12-SM	6029306
<b>Plug connectors and cables</b>			
	Head A: female connector, M12, 8-pin, straight Head B: cable Cable: PVC, shielded, 5 m	DOL-1208-G05MA	6020993
	Head A: female connector, M12, 8-pin, straight Head B: male connector, M12, 8-pin, straight Cable: drag chain use, PUR, halogen-free, shielded, 1 m	DSL-1208-G01MAC	6026625

## 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)