



HLG2-050E811

HLG

SWITCHING AUTOMATION LIGHT GRIDS

SICK
Sensor Intelligence.



Ordering information

Type	Part no.
HLG2-050E811	1041849

Other models and accessories → www.sick.de/HLG



Detailed technical data

Features

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

Performance

Maximum range	2 m
Minimum range	≥ 0 mm
Working range	1.5 m
Response time	Parallel beam ≥ 3 ms ¹⁾

¹⁾ With resistive load.

Interfaces

Switching output	2 x NPN (Q and /Q)
Connection type	Male connector M12, 8-pin

Mechanics/electronics

Wave length	950 nm
Supply voltage V_s	DC 15 V ... 30 V ¹⁾
Power consumption sender	< 100 mA ¹⁾
Power consumption receiver	> 100 mA ¹⁾
Ripple	< 5 V _{pp}
Output current I_{max.}	≤ 100 mA
Output load capacitive	100 nF
Output load inductive	1 H

¹⁾ Typical value.

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

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

¹⁾ Typical value.

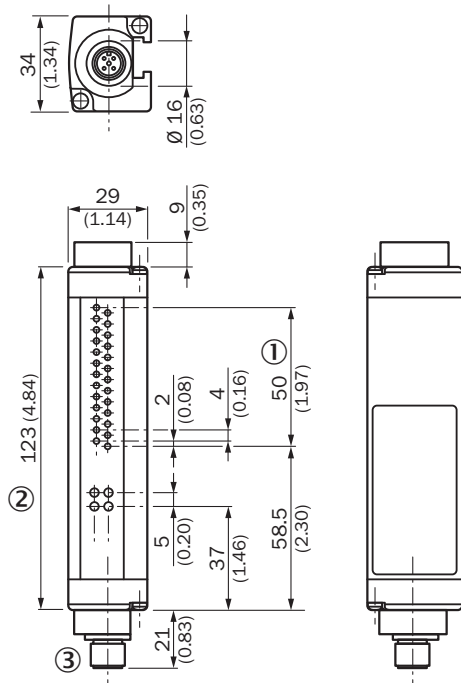
²⁾ Q = active, if at least one beam is interrupted, /Q = active, if all of the beams are free.

Ambient data

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

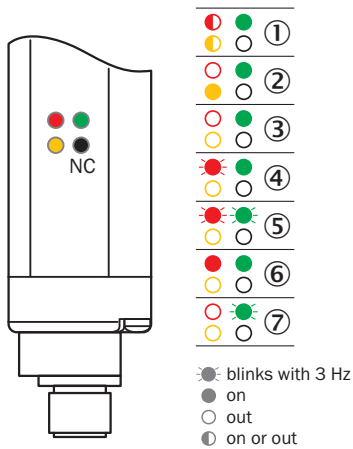
¹⁾ Sunlight.

Dimensional drawing (Dimensions in mm (inch))



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

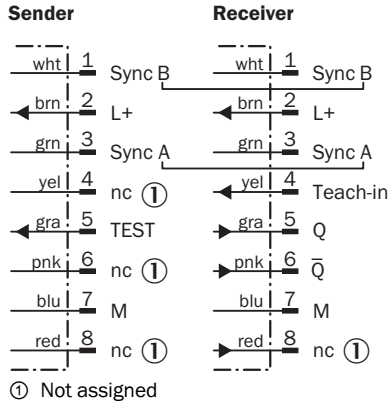
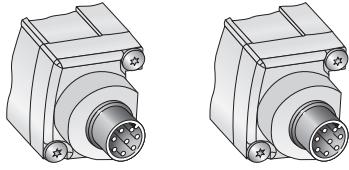
Adjustments



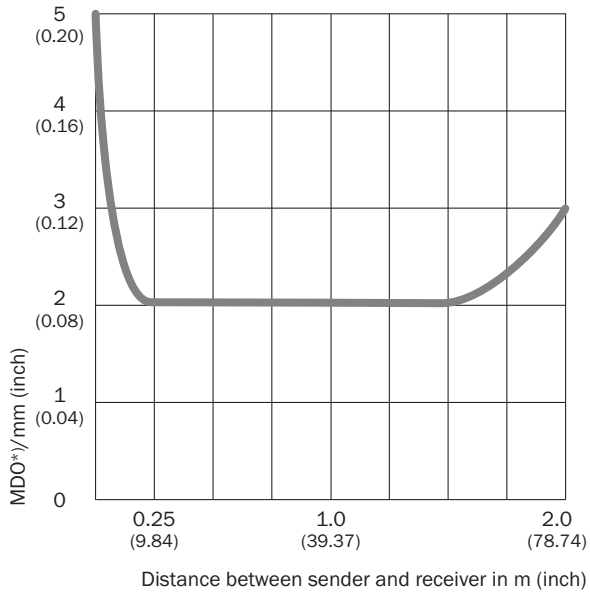
- ① Supply voltage
- ② No object in the light path
- ③ Object in the light path
- ④ Sync error
- ⑤ Weak received signal during teach-in
- ⑥ Device error
- ⑦ Teach-in process active

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

	Brief description	Type	Part no.
Terminal and alignment brackets			
	4 pieces, Mounting kit 1, rotatable, swivel mount, plastic	BEF-2SMKEAKU4	2019649
Adapters and distributors			
	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
Plug connectors and cables			
	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:

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