

# MLG5-0550F51L

MLG

MEASURING AUTOMATION LIGHT GRIDS

**SICK**  
Sensor Intelligence.



### Ordering information

Type	Part no.
MLG5-0550F51L	1023623

Other models and accessories → [www.sick.com/MLG](http://www.sick.com/MLG)



### Detailed technical data

#### Features

<b>Minimum detectable object (MDO)</b>	Cross beam, 30 mm <sup>1)</sup>
<b>Beam separation</b>	50 mm
<b>Number of beams</b>	12
<b>Detection height</b>	550 mm
<b>Configuration</b>	3-times cross beam and Q inv.

<sup>1)</sup> MDO min. detectable object.

#### Mechanics/electronics

<b>Light source</b>	Infrared light
<b>Wave length</b>	880 nm
<b>Supply voltage V<sub>s</sub></b>	DC 18 V ... 30 V <sup>1)</sup>
<b>Power consumption sender</b>	164 mA <sup>2)</sup>
<b>Power consumption receiver</b>	136 mA <sup>2)</sup>
<b>Ripple</b>	< 5 V <sub>pp</sub>
<b>Output current I<sub>max.</sub></b>	≤ 100 mA <sup>3)</sup>
<b>Output load capacitive</b>	100 nF
<b>Output load inductive</b>	1 H
<b>Initialization time</b>	1 s
<b>Dimensions (W x H x D)</b>	34 mm x 664 mm x 29 mm
<b>Connection type</b>	Male connector M12, 5-pin
<b>Housing material</b>	Aluminum
<b>Indication</b>	7-segment display, 7-segment display

<sup>1)</sup> Without load.

<sup>2)</sup> , Without load with 24 V.

<sup>3)</sup> Typical value.

<sup>4)</sup> Operating in outdoor condition only with a external protection housing.

<b>Synchronization</b>	Cable
<b>Enclosure rating</b>	IP65 4)
<b>Circuit protection</b>	U <sub>V</sub> connections, reverse polarity protected, Output Q short-circuit protected, Interference pulse suppression
<b>Protection class</b>	III
<b>Weight</b>	1.765 kg
<b>Front screen</b>	PMMA

1) Without load.

2) , Without load with 24 V.

3) Typical value.

4) Operating in outdoor condition only with a external protection housing.

## Performance

<b>Maximum range</b>	7 m <sup>1)</sup>
<b>Minimum range</b>	Cross beam: ≥ 840 mm
<b>Operating range</b>	5 m
<b>Response time</b>	Cross beam, 8.4 ms <sup>2)</sup>

1) No reserve for environmental issue and deterioration of the diode.

2) With resistive load.

## Interfaces

<b>Switching output</b>	1 x PNP
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## Ambient data

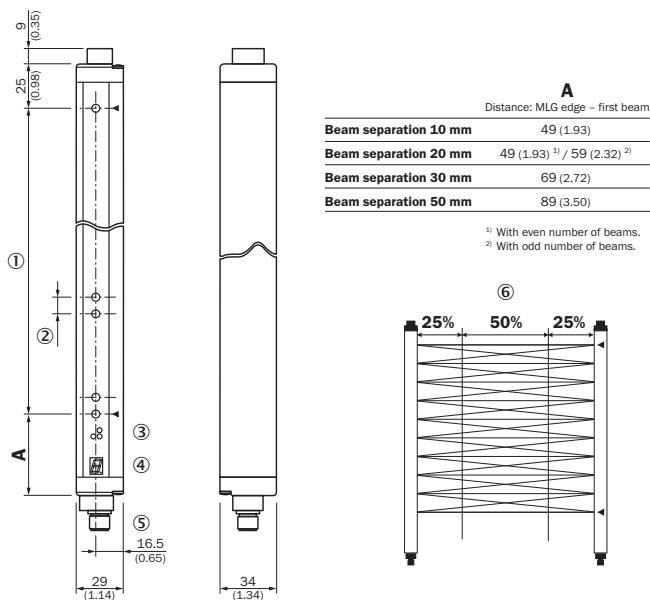
<b>EMC</b>	EN 60947-5-2
<b>Ambient operating temperature</b>	-25 °C +55 °C
<b>Ambient storage temperature</b>	-40 °C +70 °C
<b>Ambient light immunity</b>	Direct: 12,500 lx <sup>1)</sup> Indirect: 50,000 lx <sup>1)</sup>
<b>Vibration resistance</b>	5 g, 10 Hz ... 55 Hz (IEC 68-2-6)
<b>Shock load</b>	10 g / IEC 68-2-29 / 16 ms

1) Sunlight.

## Classifications

<b>ECl@ss 5.0</b>	27270910
<b>ECl@ss 5.1.4</b>	27270910
<b>ECl@ss 6.0</b>	27270910
<b>ECl@ss 6.2</b>	27270910
<b>ECl@ss 7.0</b>	27270910
<b>ECl@ss 8.0</b>	27270910
<b>ECl@ss 8.1</b>	27270910
<b>ECl@ss 9.0</b>	27270910
<b>ETIM 5.0</b>	EC002549
<b>ETIM 6.0</b>	EC002549
<b>UNSPSC 16.0901</b>	39121528

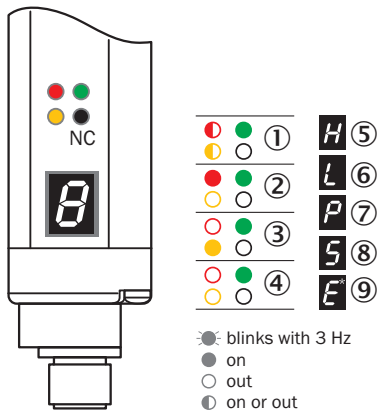
**Dimensional drawing** (Dimensions in mm (inch))



- ① Detection height (see optical performance)
- ② Beam separation (10, 20, 30, 50 mm)
- ③ Status indicator: green, yellow, red LEDs
- ④ Indicator panel, 7-segment display
- ⑤ Male connector M12, 5-pin
- ⑥ Kreuzstrahl\*

**Adjustments**

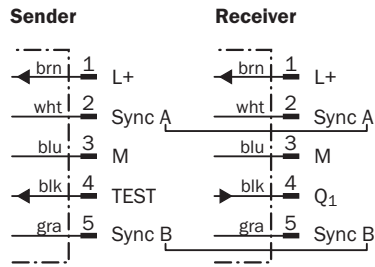
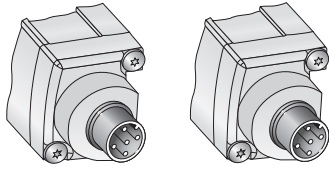
Setting options, receiver



- ① Supply voltage
- ② Device error
- ③ No object in the light path
- ④ Contamination control
- ⑤ Blocked Beams Hold (BBH)
- ⑥ Activated teach-in procedure
- ⑦ ParamMode is active
- ⑧ Standby
- ⑨ Error: E1 = sync. error; E2 = less receiver signal; E9 = defect

## Connection type and diagram

Connection type and diagram



## 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)