

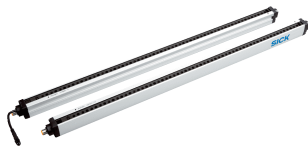


# MLG2-0140F812

MLG

MEASURING AUTOMATION LIGHT GRIDS

**SICK**  
Sensor Intelligence.



## Ordering information

Type	Part no.
MLG2-0140F812	1025653

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



## Detailed technical data

## Features

<b>Technology</b>	Sender/receiver
<b>Minimum detectable object (MDO)</b>	Parallel beam, 25 mm <sup>1)</sup>
<b>Beam separation</b>	20 mm
<b>Number of beams</b>	8
<b>Detection height</b>	140 mm
<b>Configuration</b>	Parameterization interface (measuring)

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

## Performance

<b>Maximum range</b>	7 m <sup>1)</sup>
<b>Minimum range</b>	Parallel beam: ≥ 0 mm
<b>Operating range</b>	5 m
<b>Response time</b>	Parallel beam, 2.2 ms <sup>2)</sup>

<sup>1)</sup> No reserve for environmental issue and deterioration of the diode.

<sup>2)</sup> With resistive load.

## Interfaces

<b>Switching output</b>	3 x PNP
<b>Inputs</b>	1 x PNP
<b>Connection type</b>	Male connector M12, 8-pin
<b>Communication interface</b>	-

## Mechanics/electronics

<b>Wave length</b>	Infrared light, 880 nm
<b>Supply voltage V<sub>s</sub></b>	DC 18 V ... 30 V <sup>1)</sup>
<b>Power consumption sender</b>	156 mA <sup>2)</sup>
<b>Power consumption receiver</b>	124 mA <sup>2)</sup>
<b>Ripple</b>	< 5 V <sub>pp</sub>

<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>Output current <math>I_{\max}</math></b>	$\leq 100 \text{ mA}^{3)}$
<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 224 mm x 29 mm
<b>Housing material</b>	Aluminum
<b>Indication</b>	7-segment display, 7-segment display
<b>Synchronization</b>	Cable
<b>Enclosure rating</b>	IP65 <sup>4)</sup>
<b>Circuit protection</b>	$U_V$ connections, reverse polarity protected, Output Q short-circuit protected, Interference pulse suppression
<b>Weight</b>	0.822 kg
<b>Front screen</b>	PMMA

<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.

#### Ambient data

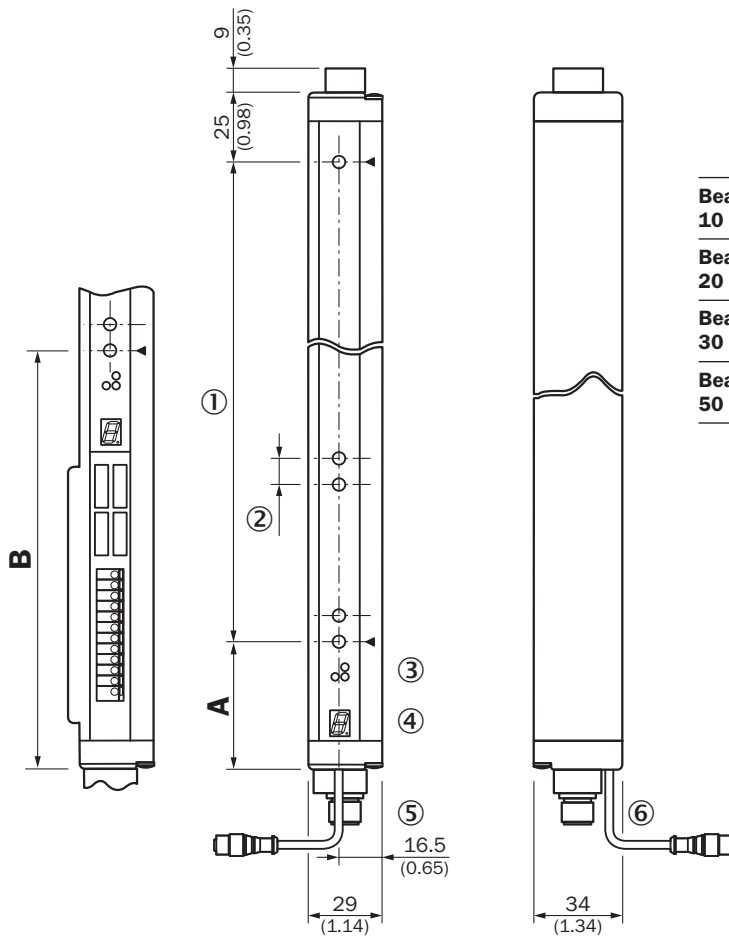
<b>Protection class</b>	III
<b>EMC</b>	EN 60947-5-2
<b>Ambient operating temperature</b>	-25 °C +55 °C
<b>Ambient storage temperature</b>	-40 °C +70 °C
<b>Ambient light immunity</b>	Direct: 12,500 lx <sup>1)</sup> Indirect: 50,000 lx <sup>1)</sup>
<b>Vibration resistance</b>	5 g, 10 Hz ... 55 Hz (IEC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

<sup>1)</sup> Sunlight.

#### Classifications

<b>ECI@ss 5.0</b>	27270910
<b>ECI@ss 5.1.4</b>	27270910
<b>ECI@ss 6.0</b>	27270910
<b>ECI@ss 6.2</b>	27270910
<b>ECI@ss 7.0</b>	27270910
<b>ECI@ss 8.0</b>	27270910
<b>ECI@ss 8.1</b>	27270910
<b>ECI@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))



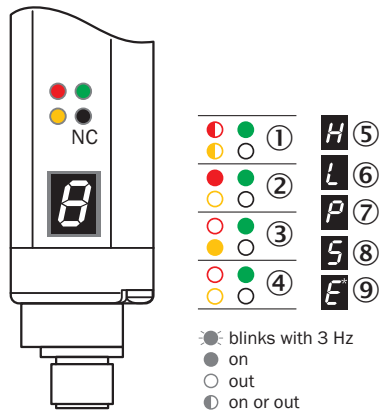
	A	B
Distance: MLG edge – first beam		
<b>Beam separation MLG1</b>		
<b>10 mm</b>	49 (1.93)	160 (6.30)
<b>Beam separation MLG2</b>	49 (1.93) <sup>1)</sup>	
<b>20 mm</b>	59 (2.32) <sup>2)</sup>	170 (6.69)
<b>Beam separation MLG3</b>		
<b>30 mm</b>	69 (2.72)	180 (7.09)
<b>Beam separation MLG5</b>		
<b>50 mm</b>	89 (3.50)	200 (7.87)

<sup>1)</sup> With even number of beams.

<sup>2)</sup> With odd number of beams.

## Adjustments

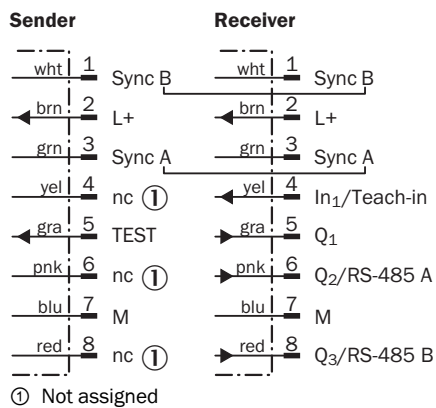
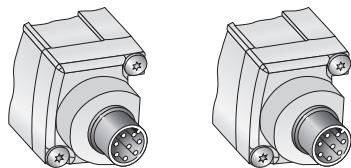
Indication LED



- 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



## Recommended accessories

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

	Brief description	Type	Part no.
Mounting brackets and plates			
	Side mounting with T-nuts, 4 pieces, mounting hardware included	BEF-NUT-MLG	2023696
	Metal mounting bracket, compact, steel, zinc coated, Set, consisting of 4 pieces, without mounting hardware	BEF-WK-XLG	2029100
Terminal and alignment brackets			
	4 pieces, Mounting kit 1, rotatable, swivel mount, Plastic	BEF-2SMKEAKU4	2019649
Plug connectors and cables			
	Head A: female connector, M12, 8-pin, straight, A-coded Head B: open cable ends Cable: Sensor/actuator cable, PVC, shielded, 2 m	YF2A28-020VA6XLEAX	2096243
	Head A: female connector, M12, 8-pin, straight, A-coded Head B: open cable ends Cable: Sensor/actuator cable, PVC, shielded, 5 m	YF2A28-050VA6XLEAX	2096244
	Head A: female connector, M12, 8-pin, straight, A-coded Head B: open cable ends Cable: Sensor/actuator cable, PVC, shielded, 10 m	YF2A28-100VA6XLEAX	2096245
	Head A: female connector, M12, 8-pin, angled, A-coded Head B: open cable ends Cable: Sensor/actuator cable, PVC, shielded, 2 m	YG2A28-020VA6XLEAX	2096218
	Head A: female connector, M12, 8-pin, angled, A-coded Head B: open cable ends Cable: Sensor/actuator cable, PVC, shielded, 5 m	YG2A28-050VA6XLEAX	2096219
	Head A: female connector, M8, 4-pin, straight Head B: female connector, D-Sub, 9-pin, straight Cable: unshielded, 2 m Rectangular plug-in system, parameterization cable	DSL-8D04-G02M	2023695
	Head A: female connector, M12, 8-pin, straight, A-coded Head B: male connector, M12, 8-pin, straight, A-coded Cable: Sensor/actuator cable, PUR, halogen-free, shielded, 2 m	YF2A28-020UA6M2A28	2096105
	Head A: female connector, M12, 8-pin, straight, A-coded Head B: male connector, M12, 8-pin, straight, A-coded Cable: Sensor/actuator cable, PUR, halogen-free, shielded, 5 m	YF2A28-050UA6M2A28	2096106
	Head A: female connector, M12, 8-pin, straight, A-coded Head B: male connector, M12, 8-pin, straight, A-coded Cable: Sensor/actuator cable, PUR, halogen-free, shielded, 10 m	YF2A28-100UA6M2A28	2096109

## 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)