

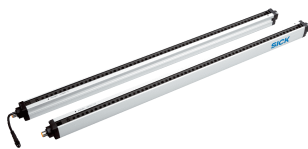


MLG1-1040I212

MLG

MEASURING AUTOMATION LIGHT GRIDS

SICK
Sensor Intelligence.



Ordering information

Type	Part no.
MLG1-1040I212	1023584

Other models and accessories → www.sick.com/MLG



Detailed technical data

Features

Technology	Sender/receiver
Minimum detectable object (MDO)	Parallel beam, 15 mm ¹⁾
Beam separation	10 mm
Number of beams	105
Detection height	1,040 mm
Configuration	Parameterization interface (measuring)

¹⁾ MDO min. detectable object.

Performance

Maximum range	7 m ¹⁾
Minimum range	Parallel beam: ≥ 0 mm
Operating range	5 m
Response time	Parallel beam, 16.75 ms ²⁾

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

²⁾ With resistive load.

Interfaces

Switching output	4 x PNP
Inputs	2 x PNP
Connection type	Terminals
Data interface	RS-485
Communication interface	-

Mechanics/electronics

Wave length	Infrared light, 880 nm
Supply voltage V_s	DC 18 V ... 30 V ¹⁾
Power consumption sender	350 mA ²⁾
Power consumption receiver	415 mA ²⁾

¹⁾ Without load.

²⁾ , Without load with 24 V.

³⁾ Typical value.

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

Ripple	< 5 V _{pp}
Output current I_{max}	≤ 100 mA ³⁾
Output load capacitive	100 nF
Output load inductive	1 H
Initialization time	1 s
Dimensions (W x H x D)	34 mm x 1,225 mm x 29 mm
Housing material	Aluminum
Indication	7-segment display, 7-segment display
Synchronization	Cable
Enclosure rating	IP65 ⁴⁾
Circuit protection	U _V connections, reverse polarity protected, Output Q short-circuit protected, Interference pulse suppression
Weight	2.892 kg
Front screen	PMMA

¹⁾ Without load.

²⁾ , Without load with 24 V.

³⁾ Typical value.

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

Ambient data

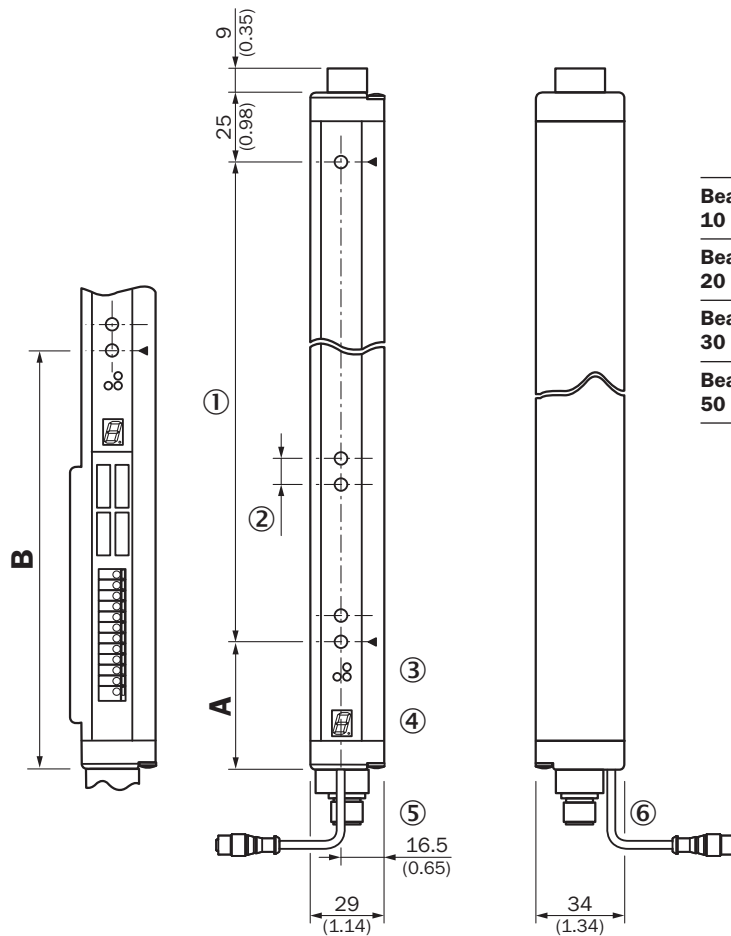
Protection class	III
EMC	EN 60947-5-2
Ambient operating temperature	-25 °C +55 °C
Ambient storage temperature	-40 °C +70 °C
Ambient light immunity	Direct: 12,500 lx ¹⁾ Indirect: 50,000 lx ¹⁾
Vibration resistance	5 g, 10 Hz ... 55 Hz (IEC 68-2-6)
Shock load	10 g / IEC 68-2-29 / 16 ms

¹⁾ Sunlight.

Classifications

ECI@ss 5.0	27270910
ECI@ss 5.1.4	27270910
ECI@ss 6.0	27270910
ECI@ss 6.2	27270910
ECI@ss 7.0	27270910
ECI@ss 8.0	27270910
ECI@ss 8.1	27270910
ECI@ss 9.0	27270910
ETIM 5.0	EC002549
ETIM 6.0	EC002549
UNSPSC 16.0901	39121528

Dimensional drawing (Dimensions in mm (inch))



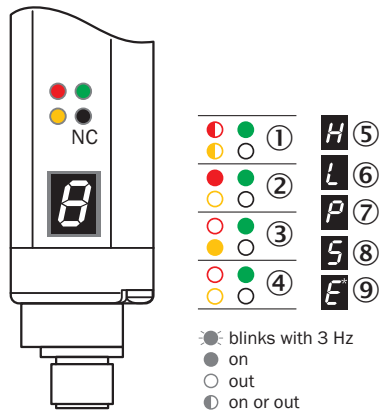
	A	B
Distance: MLG edge – first beam		
Beam separation MLG1		
10 mm	49 (1.93)	160 (6.30)
Beam separation MLG2	49 (1.93) ¹⁾	
20 mm	59 (2.32) ²⁾	170 (6.69)
Beam separation MLG3		
30 mm	69 (2.72)	180 (7.09)
Beam separation MLG5		
50 mm	89 (3.50)	200 (7.87)

¹⁾ With even number of beams.

²⁾ With odd number of beams.

Adjustments

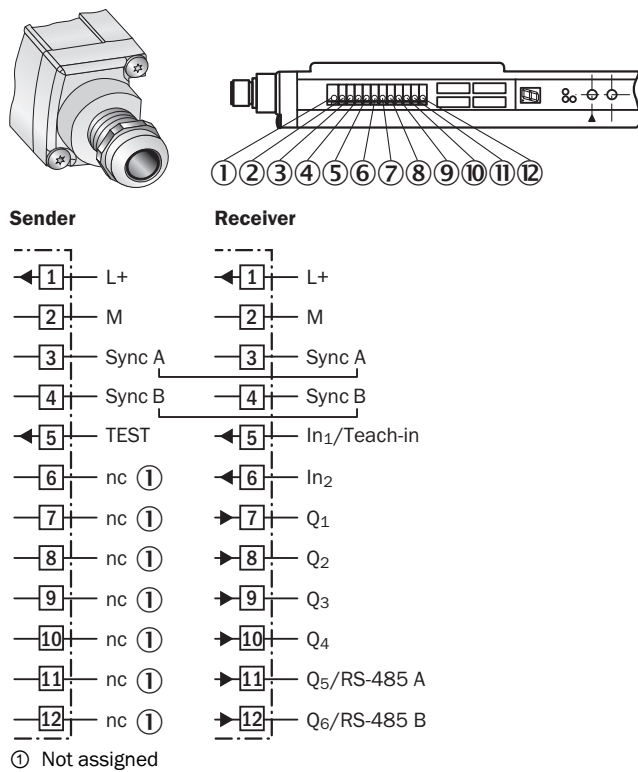
Indication LED



- 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

	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.”

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