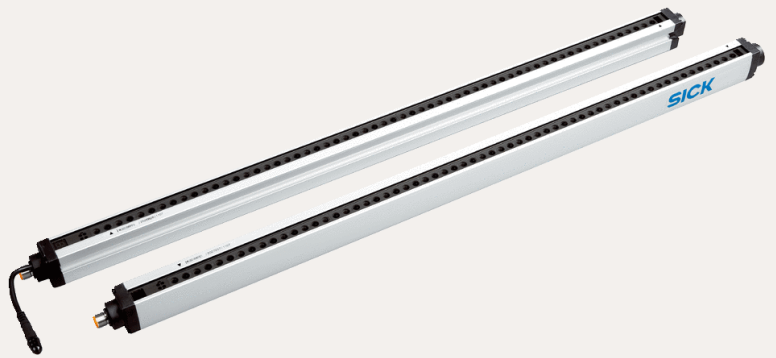




DATA SHEET

MLG2-0580F812

MLG
Automation light grids

SICK

Sensor Intelligence



Illustration may differ

AUTOMATION LIGHT GRIDS

MLG2-0580F812

ORDERING INFORMATION

Type	part no.
MLG2-0580F812	1023555

Further device versions and accessories at www.sick.com/MLG

DETAILED TECHNICAL DATA

FEATURES

Minimum detectable object (MDO)	Parallel beam, 25 mm ¹⁾
Beam separation	20 mm
Number of beams	30
Detection height	580 mm
Configuration	Parameterization interface (measuring)

¹⁾ MDO min. detectable object.

MECHANICS/ELECTRONICS

Light source	Infrared light
Wave length	880 nm
Supply voltage V _s	DC 18 V ... 30 V ¹⁾
Power consumption sender	200 mA ²⁾
Power consumption receiver	190 mA ²⁾
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
Switching output	3 x PNP
Inputs	1 x PNP

¹⁾ Without load.

²⁾ , Without load with 24 V.

³⁾ Typical value.

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

Dimensions (W x H x D)	34 mm x 664 mm x 29 mm
Connection type	Male connector M12, 8-pin
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
Protection class	III
Weight	1.834 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.

PERFORMANCE

Maximum range	7 m ¹⁾
Minimum range	Parallel beam: ≥ 0 mm
Operating range	5 m
Response time	Parallel beam, 5.5 ms ²⁾

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

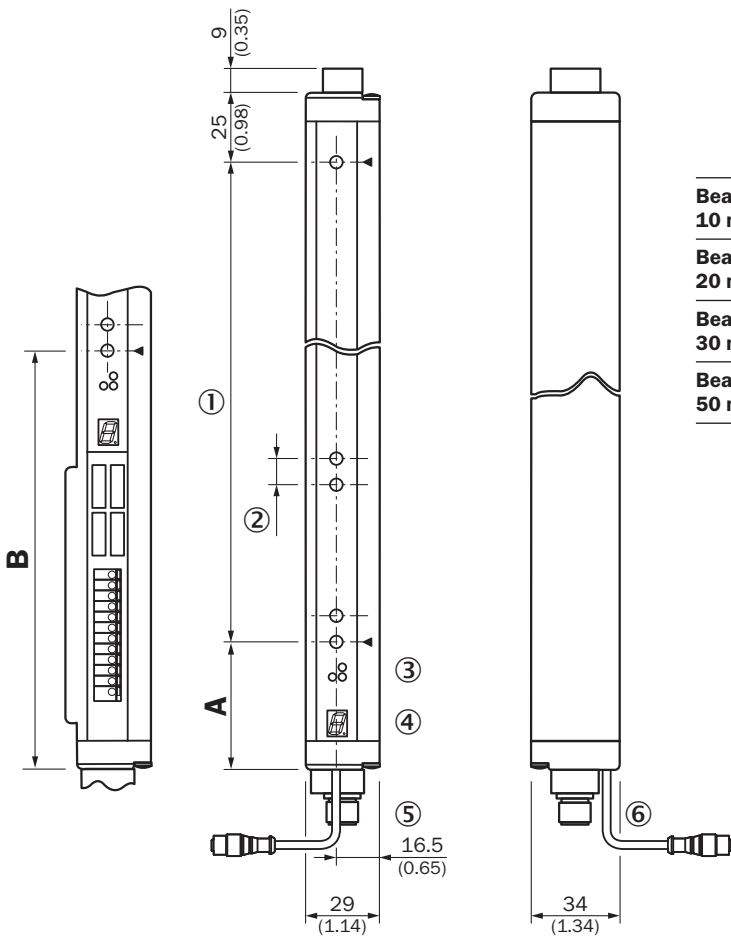
²⁾ With resistive load.

AMBIENT DATA

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

¹⁾ Sunlight.

DIMENSIONAL DRAWING

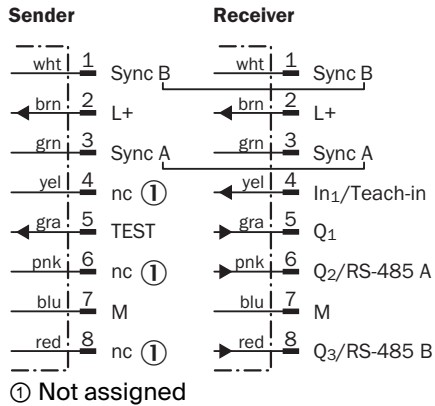
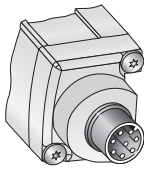
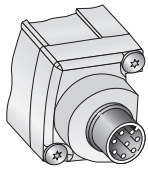


	A	B
Distance: MLG edge – first beam		
Beam separation MLG1 10 mm	49 (1.93)	160 (6.30)
Beam separation MLG2 20 mm	49 (1.93) ¹⁾ 59 (2.32) ²⁾	170 (6.69)
Beam separation MLG3 30 mm	69 (2.72)	180 (7.09)
Beam separation MLG5 50 mm	89 (3.50)	200 (7.87)

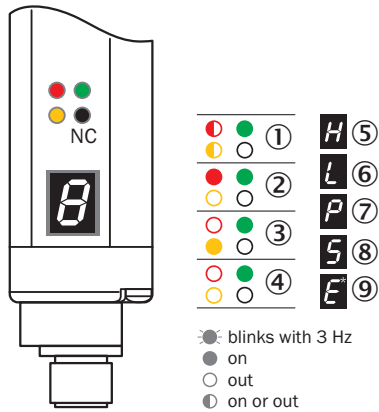
¹⁾ With even number of beams.
²⁾ With odd number of beams.

- 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 Terminals: M16 cable entry/connector M12, 12-pin
 - ⑥ Configuration connector M8, 4-pin

CONNECTION TYPE AND DIAGRAM



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

Further information as well as suitable accessories, example applications and downloads such as CAD dimensional models, operating instructions and software can be found at www.sick.com/1023555



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SICK AT A GLANCE

SICK is a leading global technology company for intelligent sensors and integrated solutions in industrial automation. Our technologies set benchmarks, making your industrial processes more efficient, safer and more sustainable – both in logistics and manufacturing operations.

SICK combines sensor intelligence with industry expertise and certified consulting services. We provide the ideal foundation for scalable as well as tailor-made automation solutions and create added value along the entire value chain. Our close partnerships with our customers are more than just a promise: Together, we optimize productivity, improve quality, protect health and safety, and help build a sustainable future. All with empathy and trust.

Since 1946, we have been developing innovative technologies with passion and a pioneering spirit. With a global network in around 40 countries, SICK has a global presence and is always close by. The company's headquarters are located in Waldkirch near Freiburg, Germany. Our customers benefit from our understanding of both local and global requirements, which enables us to deliver tailor-made solutions

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