

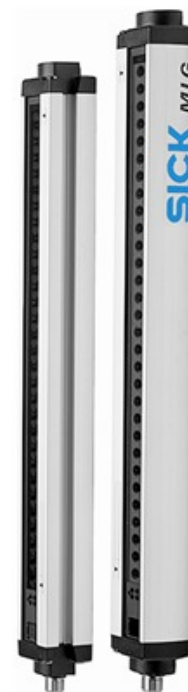


Advanced automation light grids MLG, MLG Standard

MLG1-1040F511



Model Name > [MLG1-1040F511](#)
Part No. > [1046656](#)



At a glance

- Up to 3 x PNP or NPN switching outputs
- Resolutions of 10 / 20 / 30 / 50 mm and customer-specific resolutions
- Working range up to 8.5 m
- Detection heights of over 3 m and up to 240 beams possible
- Short response time
- Automatic teach during power on

Your benefits

- Easy-to-see status information helps avoid interrupting operation, saves costs
- Different beam separation options, detection heights and output configurations ensure a reliable solution
- Integrated interfaces reduce cabling time and costs
- A fully modular system guarantees the optimal solution for the customer



Features

Technology:	Sender/receiver
Task:	Measurement light grid
Minimum detectable object (MDO) ¹⁾ :	Parallel beam: ≥ 15 mm
Beam separation:	10 mm
Number of beams:	105
Detection height:	1,040 mm
Configuration:	Standard (switching)

¹⁾ MDO min. detectable object

Performance

Maximum range ¹⁾ :	7 m
Minimum range:	Parallel beam: ≥ 0 mm
Response time ²⁾ :	Parallel beam: ≥ 16.75 ms
Working range ³⁾ :	5 m

¹⁾ No reserve for environmental issue and deterioration of the diode ²⁾ With resistive load ³⁾ Aperture $\pm 3^\circ$

Interfaces

Output type:	1 x PNP
Connection type:	Connector M12, 5-pin

IO-Link: 0

Mechanics/electronics

Wave length:	IR 880 nm
Supply voltage Vs ¹⁾ :	DC 18 V ... 30 V
Power consumption sender ²⁾ :	350 mA
Power consumption receiver ³⁾ :	415 mA
Ripple:	< 5 Vpp
Output current I _{max} :	100 mA
Output load capacitive:	100 nF
Output load inductive:	1 H
Initialization time:	1 s
Dimensions (W x H x D):	34 mm x 1,114 mm x 29 mm
Housing material:	Aluminum
Indication:	7-segment display, LED
Synchronization:	Cable
Enclosure rating:	IP 65
Circuit protection:	Output Q short-circuit protected, Interference suppression, VS connections reverse-polarity protected
Weight:	2.892 kg
Power consumption:	350 mA ⁴⁾
Front screen:	PMMA

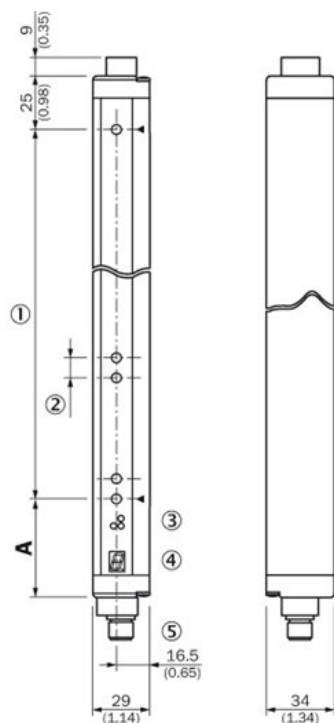
¹⁾ Without load ^{2) 3) 4)} Without load with 24 V

Ambient data

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

^{1) 2)} Sunlight

Dimensional drawing

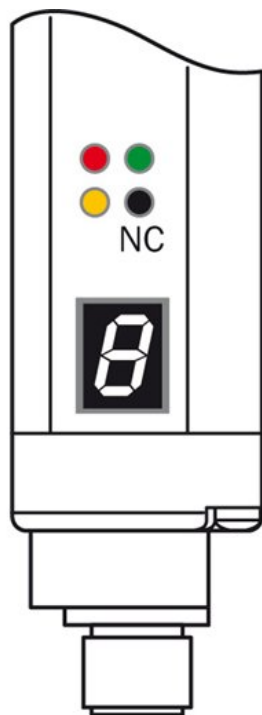


	A Distance: MLG edge - first beam
Beam separation 10 mm	49 (1.93)
Beam separation 20 mm	49 (1.93) ¹⁾ / 59 (2.32) ²⁾
Beam separation 30 mm	69 (2.72)
Beam separation 50 mm	89 (3.50)

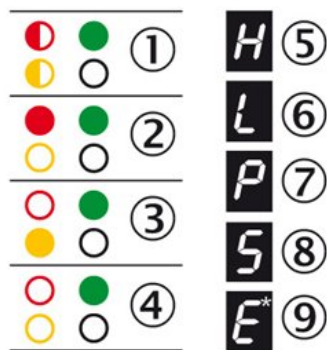
¹⁾ With even number of beams.
²⁾ With odd number of beams.

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

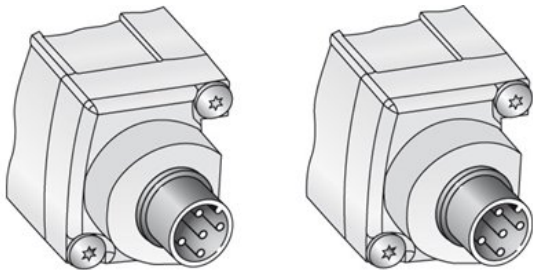
Adjustments receiver



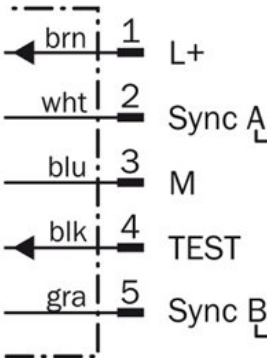
- [1] Supply voltage
- [2] Device error
- [3] No object in the light path
- [4] Pollution indication
- [5] Blocked Beams Hold (BBH)
- [6] Activated teach-in procedure
- [7] ParamMode is active
- [8] standby
- [9] Error: E1 = sync. error; E2 = less receiver signal; E9 = defect



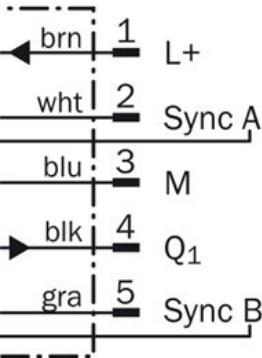
- ☀ blinks with 3 Hz
- on
- out
- ◐ on or out



Sender



Receiver



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Belgium/Luxembourg

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