



Advanced automation light grids
MLG, MLG Programmable, RS485

MLG1-1040T812



Model Name > [MLG1-1040T812](#)
Part No. > [1059322](#)



At a glance

- 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
- External teach-in for optimal sensitivity settings
- Easy-to-use setup software for customized application

Your benefits

- Intelligent evaluation software saves costs by quickly and easily turning a standard sensor into a custom problem solver, reducing the number of sensors, PLCs and programming required
- Easy-to-see status information helps avoid interrupting operation
- Different beam separation options, detection heights and output configurations ensure a reliable solution
- 6 discrete outputs for custom solutions
- Robust metal housing stands up to tough environments and reduces downtime



Features

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

Performance

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

¹⁾ No reserve for environmental issue and deterioration of the diode ²⁾ With resistive load

Interfaces

Output type:	1 x NPN
Inputs:	1 x NPN

Connection type: Connector M12, 8-pin
IO-Link: 0

Mechanics/electronics

Wave length: IR 880 nm
Supply voltage Vs: DC 18 V ... 30 V
Power consumption sender ¹⁾: 350 mA
Power consumption receiver ²⁾: 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 ³⁾
Front screen: PMMA

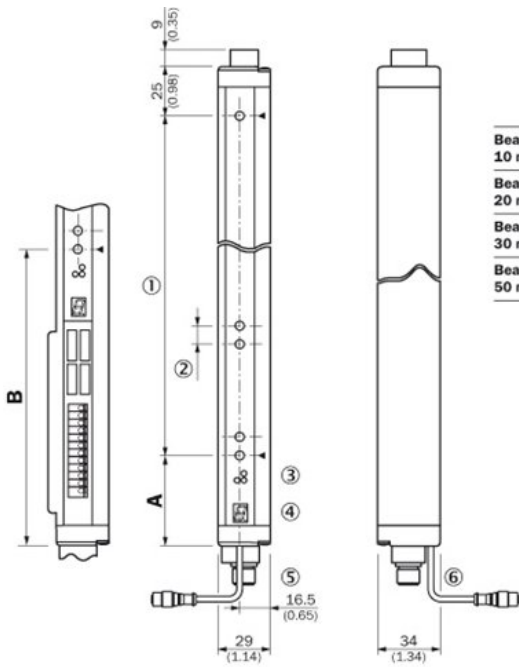
^{1) 2) 3)} Without load with 24 V

Ambient data

Protection class: III
EMC: EN 60947-5-2
Ambient temperature: Operation: -25 ... 55 °C, Storage: -40 ... 70 °C
Ambient light safety ¹⁾: 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⁾ Sunlight

Dimensional drawing

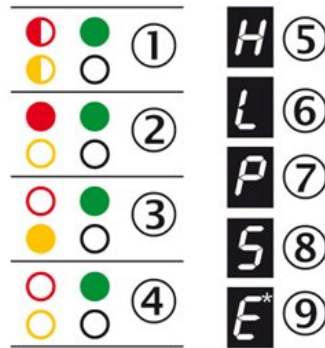
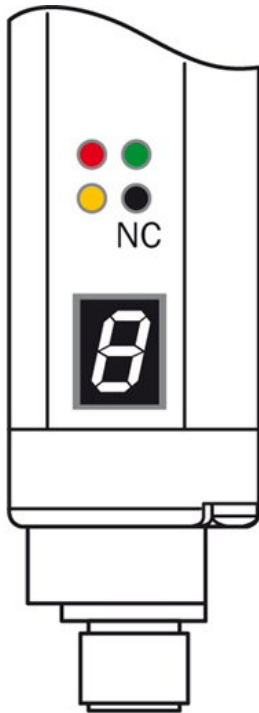


	A	B
	Distance: MLG edge - first beam	
Beam separation MLG1 10 mm	49 (1.93)	160 (6.30)
Beam separation MLG2 20 mm	49 (1.93) ¹⁾	170 (6.69) ²⁾
Beam separation MLG3 30 mm	69 (2.72)	180 (7.09)
Beam separation MLG5 50 mm	89 (3.50)	200 (7.87)

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

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

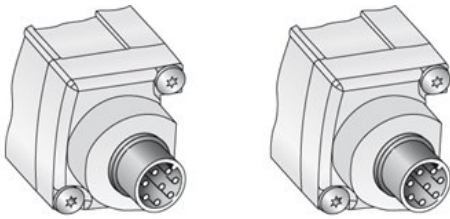
Adjustments receiver



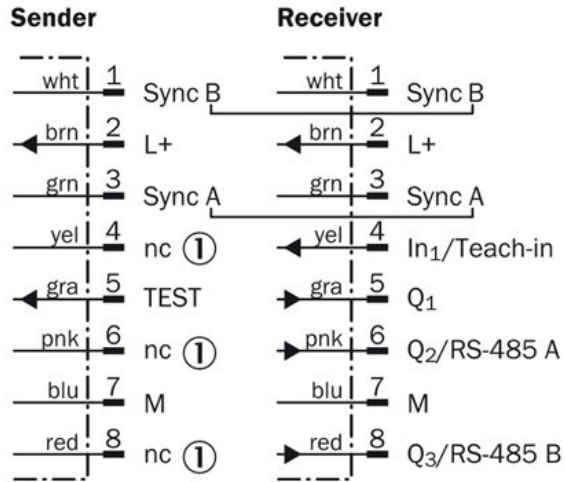
- ☉ blinks with 3 Hz
- on
- out
- ◐ on or out

- |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

Connection type and diagram



[1] not connected



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