



## Measuring automation light grids MLG, MLG Analog Output

MLG1-0590A822



**Model Name** > [MLG1-0590A822](#)  
**Part No.** > [1055807](#)



#### At a glance

- Two analog outputs: voltage to current
- 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 of
- Teach algorithm for optimal sensitivity settings in difficult applications, such as measuring translucent objects
- Easy-to-use setup software for customized applications with new features
- Software tools, such as height measurement, zoning, hole detection, and presence control make implementation of complex solutions achievable

#### 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
- Integrated analog outputs reduce integration costs for measuring applications, because no additional software is necessary
- Discrete outputs for custom solutions without a PLC
- Tough metal housing stands up to harsh environments and reduces downtime



#### Features

Technology:	Sender/receiver
Task:	Measurement light grid
Minimum detectable object (MDO):	Parallel beam, 20 mm
Beam separation:	10 mm
Number of beams:	60
Detection height:	590 mm
Configuration:	Parameterization interface (measuring)

#### Performance

Maximum range <sup>1)</sup> :	12 m
Minimum range:	Parallel beam: $\geq 0$ mm
Response time <sup>2)</sup> :	Parallel beam 10 ms
Working range:	8.5 m

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

## Interfaces

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Output type:	2 x Analog 1 x PNP
Inputs:	1 x PNP
Connection type:	Male connector M12, 8-pin
IO-Link:	-

## Mechanics/electronics

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Wave length:	Infrared light 880 nm
Supply voltage Vs:	DC 18 V ... 30 V
Power consumption sender <sup>1)</sup> :	260 mA
Power consumption receiver <sup>2)</sup> :	280 mA
Ripple:	< 5 Vpp
Output current I <sub>max</sub> .:	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 664 mm x 29 mm
Housing material:	Aluminum
Indication:	7-segment display
Enclosure rating:	IP 65
Circuit protection:	Output Q short-circuit protected, Interference suppression, VS connections reverse-polarity protected
Weight:	1.857 kg
Front screen:	PMMA
Synchronization:	Cable

1) 2) Without load with 24 V

## Ambient data

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

1) 2) Sunlight

## Dimensional drawing

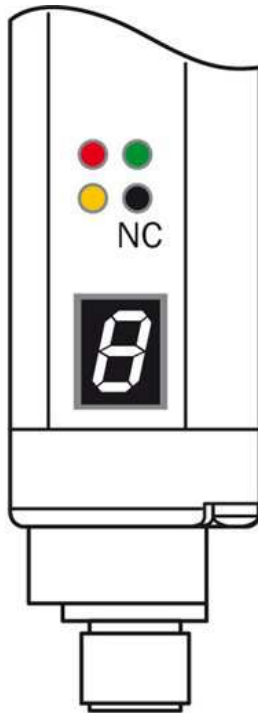


	A	B
	Distance: MLG edge - first beam	
<b>Beam separation MLG1 10 mm</b>	49 (1.93)	160 (6.30)
<b>Beam separation MLG2 20 mm</b>	49 (1.93) <sup>1)</sup>	170 (6.69)
<b>Beam separation MLG3 30 mm</b>	69 (2.72)	180 (7.09)
<b>Beam separation MLG5 50 mm</b>	89 (3.50)	200 (7.87)

<sup>1)</sup> With even number of beams.  
<sup>2)</sup> With odd number of beams.

- |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

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