



Measuring automation light grids CANopen , MLG, MLG CANopen

MLG5-1600C811



Model Name > [MLG5-1600C811](#)
Part No. > [1068066](#)



At a glance

- Integrated CANopen interface
- 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

Your benefits

- The CANopen software is 2.0 CIA/DS-301 for easy integration in the control system
- Low cabling requirement reduces installation costs
- Easy-to-see light grid status information via the bus system helps avoid interrupting operation
- Different beam separation options, detection heights and output configurations ensure a reliable solution
- Robust metal housing stands up to tough environments and reduces downtime



Features

| | |
|----------------------------------|----------------------|
| Technology: | Sender/receiver |
| Minimum detectable object (MDO): | Parallel beam, 55 mm |
| Beam separation: | 50 mm |
| Number of beams: | 33 |
| Detection height: | 1,600 mm |
| Configuration: | ESD file |

Performance

| | |
|-------------------------------|-----------------------|
| Maximum range ¹⁾ : | 7 m |
| Minimum range: | Parallel beam: ≥0 mm |
| Response time ²⁾ : | Parallel beam 5.95 ms |
| Working range: | 5 m |

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

Interfaces

| | |
|-----------------|---------|
| Data interface: | CANopen |
| Output type: | 1 x PNP |
| Inputs: | 1 x PNP |

Electrical connection: Male connector M12, 8-pin
IO-Link: -

Mechanics/electronics

Wave length: Infrared light 880 nm
Supply voltage Vs: DC 18 V ... 30 V
Power consumption sender ¹⁾: 206 mA
Power consumption receiver ²⁾: 199 mA
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 1,714 mm x 29 mm
Housing material: Aluminum
Indication: 7-segment display
Circuit protection: Output Q short-circuit protected, Interference suppression, VS connections reverse-polarity protected
Weight: 4.18 kg
Front screen: PMMA
Synchronization: Cable

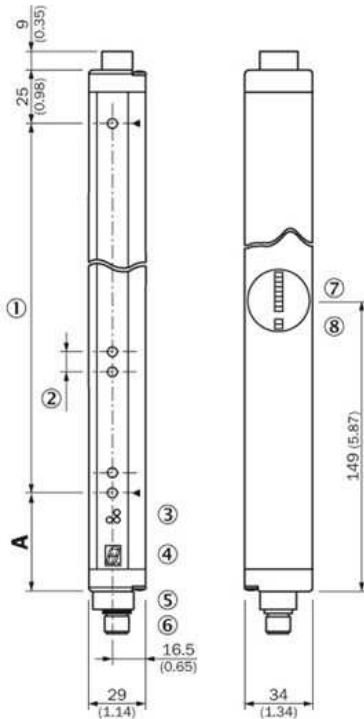
^{1) 2)} Without load with 24 V

Ambient data

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

¹⁾ 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| Ground
- |6| Connector M12, 8-pin (for CANopen adapter)
- |7| Address setting
- |8| Sensitivity baud rate

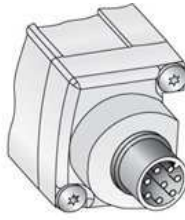
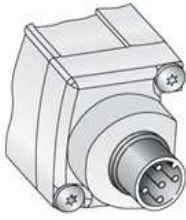
Adjustments receiver



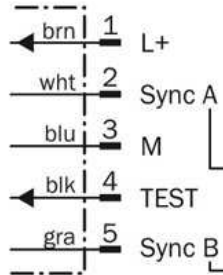
- ☉ blinks with 3 Hz
- on
- out
- ◐ on or out

- |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

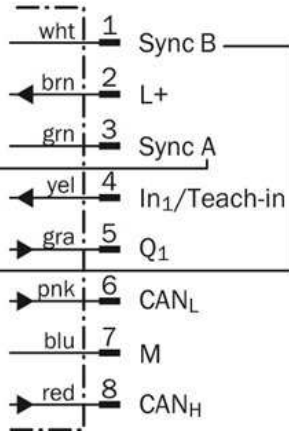
Connection type and diagram



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