

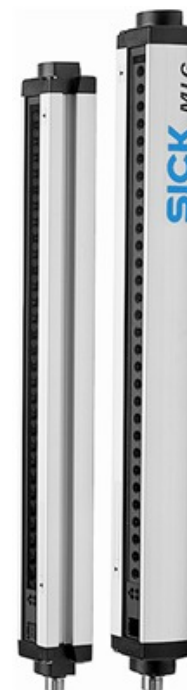


## Advanced automation light grids MLG, MLG Standard

MLG1-1190F811



**Model Name** > [MLG1-1190F811](#)  
**Part No.** > [1057963](#)



#### 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): | Parallel beam: $\geq 15$ mm |
| Beam separation:                 | 10 mm                       |
| Number of beams:                 | 120                         |
| Detection height:                | 1,190 mm                    |
| Configuration:                   | Standard (switching)        |

#### Performance

|                               |                             |
|-------------------------------|-----------------------------|
| Maximum range <sup>1)</sup> : | 7 m                         |
| Minimum range:                | Parallel beam: $\geq 0$ mm  |
| Response time <sup>2)</sup> : | Parallel beam: $\geq 19$ ms |
| Working range:                | 5 m                         |

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

#### Interfaces

|                  |                      |
|------------------|----------------------|
| Output type:     | 3 x PNP              |
| Inputs:          | 1 x PNP              |
| Connection type: | Connector M12, 8-pin |
| IO-Link:         | 0                    |

## Mechanics/electronics

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|                                            |                                                                                                       |
|--------------------------------------------|-------------------------------------------------------------------------------------------------------|
| Wave length:                               | IR 880 nm                                                                                             |
| Supply voltage Vs:                         | DC 18 V ... 30 V                                                                                      |
| Power consumption sender <sup>1)</sup> :   | 380 mA                                                                                                |
| Power consumption receiver <sup>2)</sup> : | 460 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 1,264 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:                                    | 3.237 kg                                                                                              |
| Power consumption:                         | 380 mA <sup>3)</sup>                                                                                  |
| Front screen:                              | PMMA                                                                                                  |

1) 2) 3) Without load with 24 V

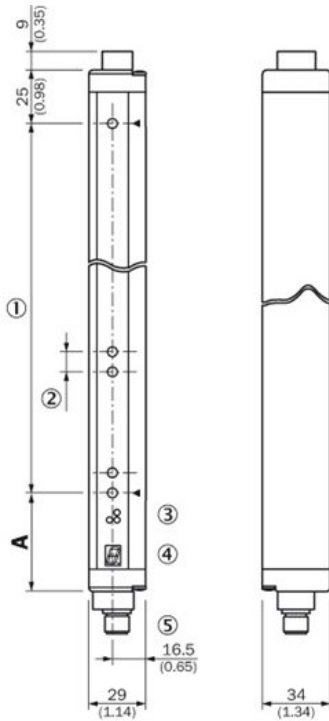
## Ambient data

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|                                                      |                                                  |
|------------------------------------------------------|--------------------------------------------------|
| Protection class:                                    | III                                              |
| EMC:                                                 | EN 60947-5-2                                     |
| Ambient temperature:                                 | Operation: -25 ... 55 °C, Storage: -40 ... 70 °C |
| Ambient light safety <sup>1)</sup> , <sup>2)</sup> : | 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) <sup>1)</sup> / 59 (2.32) <sup>2)</sup> |
| Beam separation 30 mm           | 69 (2.72)                                         |
| Beam separation 50 mm           | 89 (3.50)                                         |

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

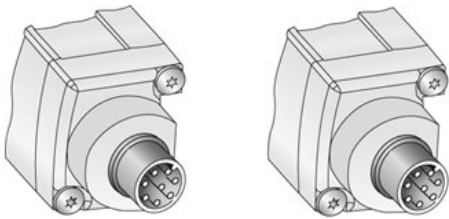
- |1| Detection height (see optical performance)
- |2| Beam separation (10, 20, 30, 50 mm)
- |3| Status indicator: LEDs green, yellow, red
- |4| Indicator panel, 7-segment display
- |5| Connector M12, 5-pin

## Adjustments receiver



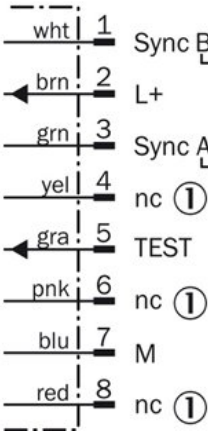
- blinks with 3 Hz
- on
- out
- on or out

- |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

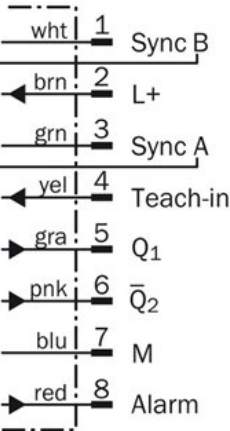


[1] not connected

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