



Advanced automation light grids  
MLG, MLG PROFIBUS, Profibus

MLG0-2380P811S23



**Model Name** > [MLG0-2380P811S23](#)  
**Part No.** > [1056370](#)



**At a glance**

- Integrated PROFIBUS 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
- External teach-in for optimal sensitivity settings

**Your benefits**

- Integrated PROFIBUS User Organization (PNO) number and GSD file for easy connection to a PLC
- 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



**Features**

Technology:	Sender/receiver
Task:	Measurement light grid (special software for pallet overhang detection)
Minimum detectable object (MDO) <sup>1)</sup> :	Parallel beam: 15 mm (10 mm beam separation);, Parallel beam: 30 mm (20 mm beam separation):
Beam separation:	10 mm (up to 300 mm detection height), 20 mm (up to 2,380 mm detection height)
Number of beams:	135
Detection height:	2,380 mm
Configuration:	GSD data file

<sup>1)</sup> MDO min. detectable object

**Performance**

Maximum range <sup>1)</sup> :	7 m
Minimum range:	Parallel beam: ≥0 mm
Response time <sup>2)</sup> :	Parallel beam: ≥21.25 ms
Working range <sup>3)</sup> :	5 m

<sup>1)</sup> No reserve for environmental issue and deterioration of the diode    <sup>2)</sup> With resistive load    <sup>3)</sup> Aperture ± 3°

## Interfaces

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

## Mechanics/electronics

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Wave length:	950 nm
Supply voltage $V_s$ <sup>1)</sup> :	DC 18 V ... 30 V
Power consumption sender <sup>2)</sup> :	113.5 mA
Power consumption receiver <sup>3)</sup> :	187.5 mA
Ripple:	10 V <sub>pp</sub>
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 2,464 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:	5.974 kg
Power consumption:	113.5 mA <sup>4)</sup>

1) Without load <sup>2) 3) 4)</sup> Typical value

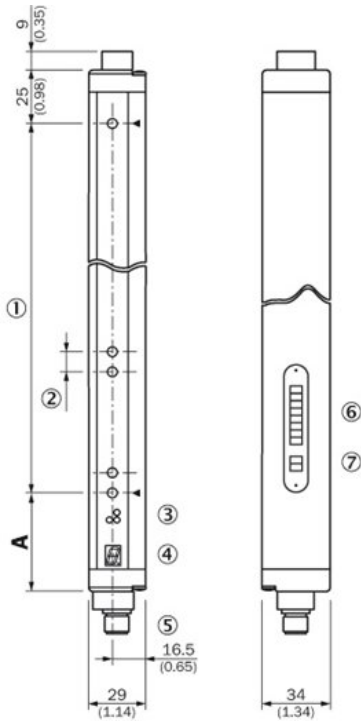
## Ambient data

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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), 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



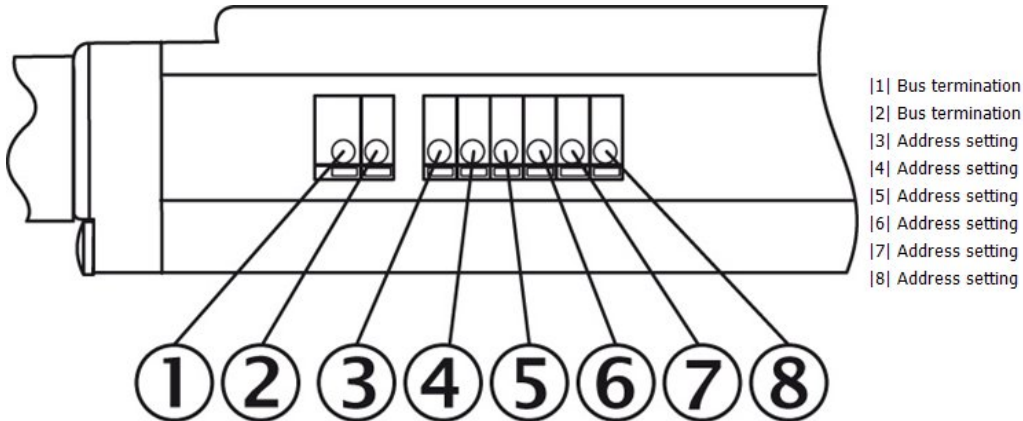
**A**  
Distance: MLG edge - first beam

<b>Beam separation 10 mm</b>	49 (1.93)
<b>Beam separation 20 mm</b>	49 (1.93) <sup>1)</sup> / 59 (2.32) <sup>2)</sup>
<b>Beam separation 30 mm</b>	69 (2.72)
<b>Beam separation 50 mm</b>	89 (3.50)

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

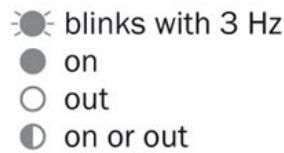
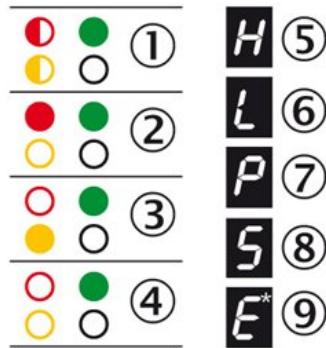
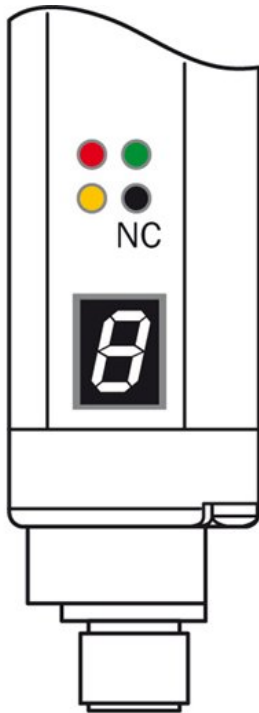
- |1| Detection height (see optical performance)
- |2| Beam separation (10, 20, 30, 50 mm)
- |3| Status indicator: LEDs green, yellow, red
- |4| Indicator panel, 7-segment display
- |5| M12 plug, 8-pin/ M12 plug 5-pin
- |6| Address setting
- |7| Bus termination

## Adjustments DIP switches



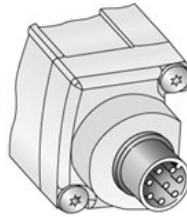
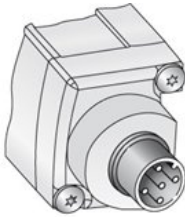
- |1| Bus termination
- |2| Bus termination
- |3| Address setting
- |4| Address setting
- |5| Address setting
- |6| Address setting
- |7| Address setting
- |8| Address setting

## Adjustments receiver

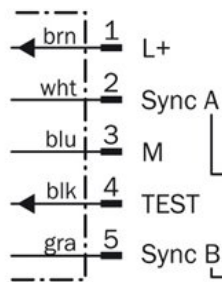


- [1] Supply voltage
- [2] Device error
- [3] No object in the light path
- [4] Pollution indication
- [5] Blocked Beams Hold (BBH)
- [6] Activated teach-in procedure
- [7] ParamMode is active
- [8] standby
- [9] Error: E1 = sync. error; E2 = less receiver signal; E9 = defect

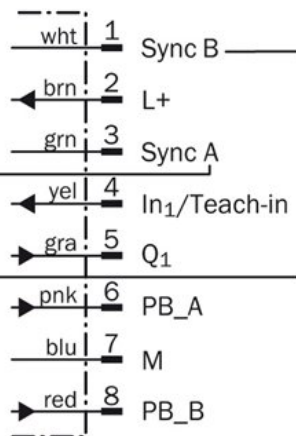
## Connection type and diagram



### Sender



### Receiver



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