



Measuring automation light grids  
2 x Analog + 1 x Q (IO-Link) , MLG-2 Prime

MLG05S-0745A10501



**Model Name** > [MLG05S-0745A10501](#)  
**Part No.** > [1213709](#)



**At a glance**

- High-resolution light grid: Available with beam separation of 5 mm, 10 mm, 25 mm, and 50 mm
- Available with three push-pull switching outputs or two analog outputs
- Display configuration with selected, pre-programmed measuring functions
- Monitoring height up to 3.2 m
- Operating range up to 8.5 m
- Optical synchronization of sender and receiver
- Cloning function via IO-Link
- Temperature range from -30 °C to +55 °C

**Your benefits**

- Easy concept: Time and cost savings due to simple configuration and quick commissioning
- Modular concept offers the perfect solution every time from a single source
- Two optical synchronization beams increase operational safety
- Simple maintenance without the need for specialist staff thanks to the cloning function with IO-Link
- Direct configuration on the device display for quick commissioning
- IO-Link as an interface for configuration, measured data transfer and diagnostics
- Minimal specialist knowledge required by the user thanks to the intuitive arrangement of the most essential functions
- Extremely high operational safety due to rugged aluminum housing



**Features**

Technology:	Sender/receiver
Minimum detectable object (MDO) <sup>1)</sup> ; <sup>2)</sup> :	9 mm
Beam separation:	5 mm
Number of beams:	150
Detection height:	745 mm
Version:	Prime
Software features:	Inverted: -, Q1: presence detection, Height measurement (first beam)/FBB, Height measurement (last beam)/LBB, Standard teach

<sup>1)</sup> MDO min. detectable object    <sup>2)</sup> Dependent from beam separation without cross beam adjustment

**Performance**

Maximum range <sup>1)</sup> :	7 m
Minimum range:	≥0 mm
Response time <sup>2)</sup> , <sup>3)</sup> :	17.3 ms
Working range:	5 m

<sup>1)</sup> No reserve for environmental issue and deterioration of the diode    <sup>2)</sup> Without high speed    <sup>3)</sup> With resistive load

## Interfaces

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Data interface:	2 x Analog + 1 x Q (IO-Link)
Electrical connection:	Connector M12, 5-pin
IO-Link:	✓

## Mechanics/electronics

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Wave length:	850 nm
Supply voltage $V_s$ <sup>1)</sup> :	DC 18 V ... 30 V
Power consumption sender <sup>2)</sup> :	62.5 mA
Power consumption receiver <sup>3)</sup> :	150 mA
Residual 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 823.3 mm x 30.6 mm
Housing material:	Aluminum
Indication:	LED
Enclosure rating:	IP 65, IP 67
Circuit protection:	Output Q short-circuit protected, Interference suppression, VS connections reverse-polarity protected
Weight:	1.747 kg
Front screen:	PMMA
Option:	Nonexistent

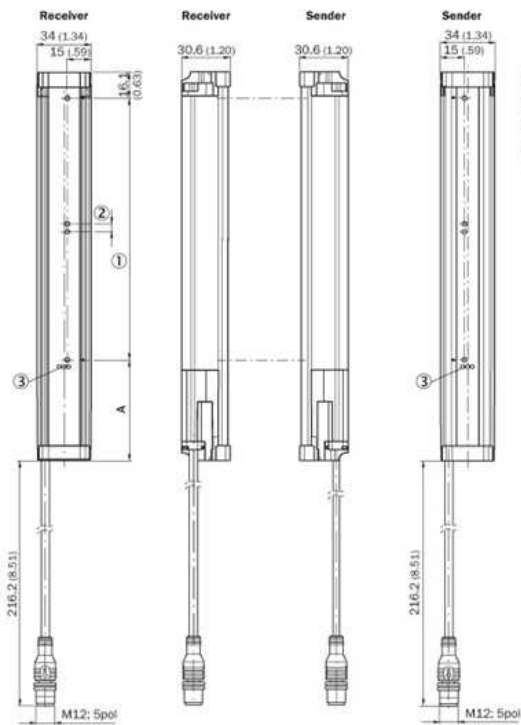
<sup>1)</sup> Without load    <sup>2)</sup> <sup>3)</sup> Without load with 24 V

## Ambient data

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Protection class:	III
EMC:	EN 60947-5-2
Ambient temperature:	Operation: -30 ... +55 °C, Storage: -40 ... +70 °C
Vibration resistance:	5 g, 10 Hz ... 55 Hz (EN 60 068-2-64)
Shock load:	15 g/DIN EN 60 068-2-27/16 ms
Ambient light immunity:	Direct: ≥12,500 lx, Indirect: ≥50,000 lx

## Dimensional drawing

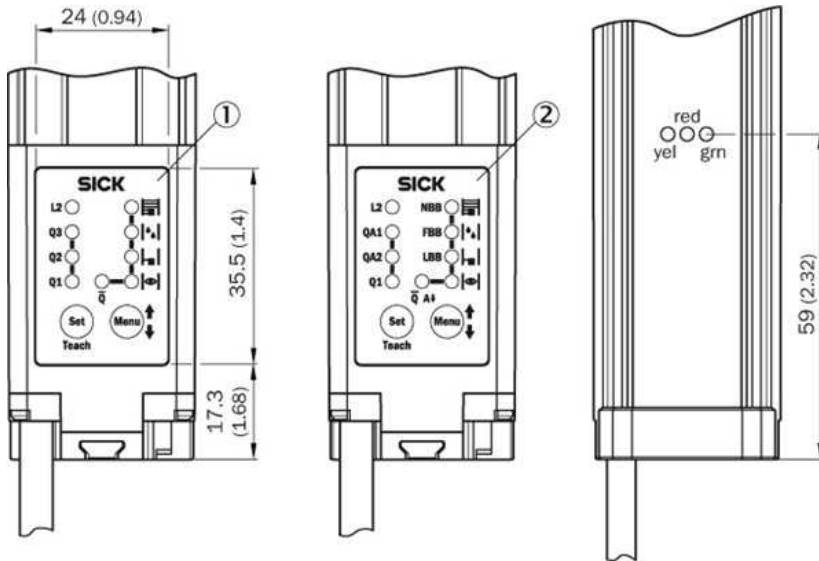


	A 1)
Beam separation 5 mm	63,3 (2,49)
Beam separation 10 mm	68,3 (2,69)
Beam separation 25 mm	83,3 (3,28)
Beam separation 50 mm	108,3 (4,26)

1) Distance: MLG edge - first beam

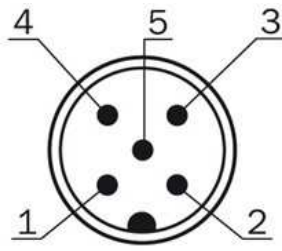
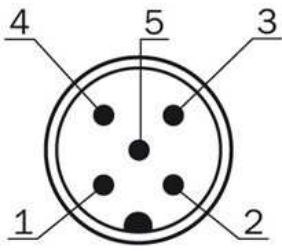
- |1| Detection height (see optical performance)
- |2| Beam separation RM
- |3| Status indicator: LEDs green, yellow, red

## Adjustments



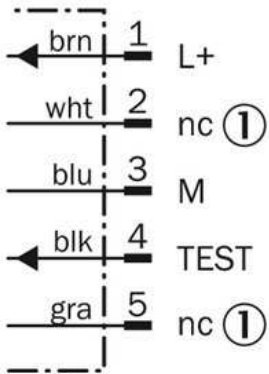
- |1| MLG-2 with switching outputs Q
- |2| MLG-2 with analog outputs QA
- |3| Status indicator: LEDs green, yellow, red

Anschlussart und -schema

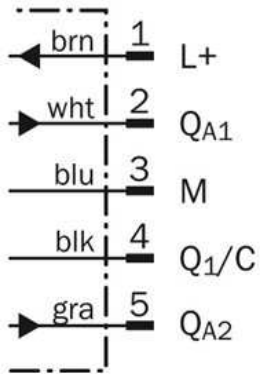


|1| not connected

**Sender**



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