

# MLG05W-0272B12501

MLG-2 WebChecker

**MEASURING AUTOMATION LIGHT GRIDS** 





# Ordering information

Туре	Part no.
MLG05W-0272B12501	1129452

Other models and accessories → www.sick.com/MLG-2\_WebChecker

Illustration may differ



#### Detailed technical data

#### **Features**

Device version	Web guiding
Sensor principle	Sender/receiver
Minimum object length	4 mm <sup>1)</sup>
Beam separation	5 mm
Resolution	0.1 mm
Cycle time	32 µs per beam
Repeatability	6 μm <sup>2)</sup>
Accuracy	± 0.3 mm <sup>3)</sup>
Type of synchronization	Cable
Number of beams	120
Total measuring field width	1,645 mm
Measuring field width detailed	
Measuring field width (connection side)	295 mm
Blind zone (medium range)	1,055 mm
Measuring field width (head side)	295 mm
Software features (default)	
Q <sub>1</sub> /C	Alarm, general
$Q_2$	Standard teach-in
$Q_{A1}$	Edge position 1, rising

 $<sup>^{1)}</sup>$  See graphic: product definition.

 $<sup>^{2)}\,\</sup>mathrm{1\,sigma},\,\mathrm{0\%}$  object transmission (sensor internal value).

<sup>3)</sup> For opaque objects and exact alignment of sender/receiver.

***	Edge position 10, rising Standard mode
Included with delivery	$1\times$ sender $1\times$ receiver $4/6$ x QuickFix brackets for monitoring heights above 2 m) $1\times$ Quick Start Guide

 $<sup>^{1)}</sup>$  See graphic: product definition.

# Mechanics/electronics

Light source	LED, Infrared light
Wave length	850 nm
Supply voltage $V_{\rm s}$	DC 19.2 V 28.8 V <sup>1)</sup>
Power consumption sender	61 mA <sup>2)</sup>
Power consumption receiver	144 mA <sup>2)</sup>
Ripple	< 5 V <sub>pp</sub>
Output current I <sub>max.</sub>	100 mA
Output load, capacitive	100 nF
Output load, Inductive	1 H
Initialization time	<1s
Switching output	Push-pull: PNP/NPN
Dimensions (W x H x D)	34 mm x 1,729.4 mm x 30.6 mm
Connection type	Male connector M12, 5-pin, 0.22 m Male connector M12, 8-pin, 0.27 m M12 female connector, 4-pin, D-coded, 0.19 m
Housing material	Aluminum
Indication	LED
Enclosure rating	IP65, IP67
Circuit protection	U <sub>V</sub> connections, reverse polarity protected Output Q short-circuit protected Interference pulse suppression
Protection class	III
Weight	3.559 kg
Front screen	PMMA
Option	None
UL File No.	NRKH.E181493

<sup>1)</sup> Without load.

### Performance

Maximum range	3.5 m <sup>1)</sup>

<sup>1)</sup> No reserve for environmental issue and deterioration of the diode.

<sup>&</sup>lt;sup>2)</sup> 1 sigma, 0% object transmission (sensor internal value).

<sup>3)</sup> For opaque objects and exact alignment of sender/receiver.

 $<sup>^{2)}</sup>$  , Without load with 24 V.

<sup>3)</sup> Operating in outdoor condition only with a external protection housing.

<sup>&</sup>lt;sup>2)</sup> With resistive load.

Minimum range	≥ 0.2 m
Operating range	2.5 m
Response time	24.9 ms <sup>2)</sup>

 $<sup>^{1)}\,\</sup>mathrm{No}$  reserve for environmental issue and deterioration of the diode.

#### Communication interface

IO-Link	<b>√</b> , IO-Link V1.1
Data transmission rate	230,4 kbit/s (COM3)
Maximum cable length	20 m
Cycle time VendorID	14 ms
	26
DeviceID HEX	80022F
DeviceID DEC	8389167
Process data length	32 Byte (TYPE_2_V) <sup>1)</sup>
Analog	<b>√</b> , Current
Inputs/outputs	2 x analog + 2 x Q (IO-Link)
Analog output	$Q_{A1}$ , $Q_{A2}$
Number	2
Туре	Current output
Current	4 mA 20 mA
Digital output	$Q_1, Q_2$
Number	2
Digital input	$Q_2$
Number	1

<sup>1)</sup> With an IO-Link master with V1.0, fall back to interleaved mode (consisting of TYPE\_1\_1 (ProcessData) and TYPE\_1\_2 (On-request Data)).

#### Ambient data

Shock resistance	Continuous shocks 10 g, 16 ms, 1000 shocks Single shocks 15 g, 11 ms 3 per axle
Vibration resistance	Sinusoidal oscillation 10-150 Hz 5 g
Ambient light immunity	100,000 lx
Ambient operating temperature	-30 °C +55 °C
Ambient temperature, storage	-40 °C +70 °C

#### Classifications

ECLASS 5.0	27270910
ECLASS 5.1.4	27270910
ECLASS 6.0	27270910
ECLASS 6.2	27270910
ECLASS 7.0	27270910
ECLASS 8.0	27270910
ECLASS 8.1	27270910
ECLASS 9.0	27270910

<sup>&</sup>lt;sup>2)</sup> With resistive load.

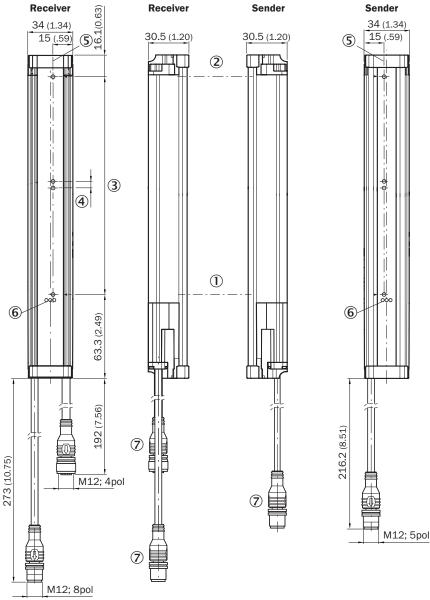
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ECLASS 10.0	27270910
ECLASS 11.0	27270910
ECLASS 12.0	27270910
ETIM 5.0	EC002549
ETIM 6.0	EC002549
ETIM 7.0	EC002549
ETIM 8.0	EC002549
UNSPSC 16.0901	39121528

# Dimensional drawing (Dimensions in mm (inch))

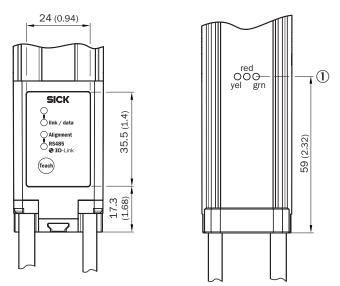
#### Dimensional drawing



- ① First beam
- ② Last beam
- 3 Total measuring field width (see technical data)
- Beam separation
- ⑤ Optical axis
- 6 Status indicator: green, yellow, red LEDs

# Adjustments

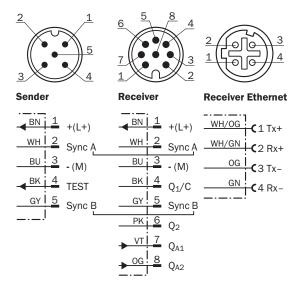
#### Adjustments



① Status indicator: green, yellow, red LEDs

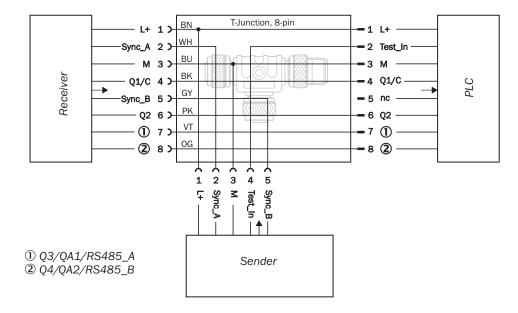
# Connection type and diagram

#### MLG-2 WebChecker

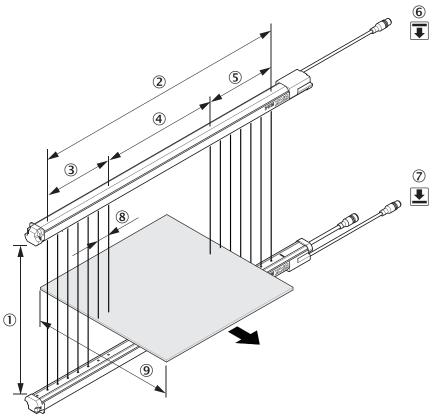


# Connection diagram

T-piece



#### **Product definition**



- ① Operating range
- ② Total measuring field width
- 3 Measuring field width (head side)
- ④ Blind zone (medium range)
- ⑤ Measuring field width (connection side)
- Sender
- ⑦ Receiver
- 8 Beam separation
- Minimum object length

### Recommended accessories

Other models and accessories → www.sick.com/MLG-2\_WebChecker

	Brief description	Туре	Part no.
Distributors			
Se.	<ul> <li>Connection type head A: Female connector, M12, 5-pin, A-coded</li> <li>Connection type head B: Female connector, M12, 8-pin, A-coded</li> <li>Connection type head C: Male connector, M12, 8-pin, A-coded</li> <li>Note: Male connector M12, 8-pin, to 1 x female connector M12, 8-pin, to 1 x female connector M12, 5-pin, for connecting of a PLC</li> </ul>	SBO-02F12-SM1	6053172

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	Brief description	Туре	Part no.	
Plug connectors and cables				
	<ul> <li>Connection type head A: Female connector, M12, 8-pin, straight</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 5 m, 8-wire, PVC</li> <li>Description: Sensor/actuator cable, special color code, shielded</li> <li>Connection systems: Flying leads</li> </ul>	DOL-1208-G05MF	6020664	
10 to	<ul> <li>Connection type head A: Female connector, M12, 5-pin, straight, A-coded</li> <li>Connection type head B: Male connector, M12, 5-pin, straight, A-coded</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 2 m, 5-wire, PUR, halogen-free</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with oils and lubricants, Drag chain operation, Robot</li> </ul>	YF2A15- 020UB5M2A15	2096009	
100	<ul> <li>Connection type head A: Female connector, M12, 8-pin, straight, A-coded</li> <li>Connection type head B: Male connector, M12, 8-pin, straight, A-coded</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 2 m, 8-wire, PUR, halogen-free</li> <li>Description: Sensor/actuator cable, shielded</li> <li>Application: Zones with oils and lubricants, Drag chain operation</li> </ul>	YF2A28- 020UA6M2A28	2096105	
P 8	<ul> <li>Connection type head A: Male connector, M12, 4-pin, straight, D-coded</li> <li>Connection type head B: Male connector, RJ45, 4-pin, straight</li> <li>Signal type: Ethernet, PROFINET</li> <li>Cable: 2 m, 4-wire, PUR, halogen-free</li> <li>Description: Ethernet, PROFINET, shielded</li> <li>Application: Drag chain operation, Zones with oils and lubricants</li> </ul>	YM2D24- 020PN1MRJA4	2106182	
Sensor Integration Gateway				
	<ul> <li>Further functions: Web server integrated, USB connection for easy configuration of the SIG200 Sensor Integration Gateway with SOPAS ET, the engineering tool from SICK, logic editor is available for easy configuration of logic functions</li> <li>Connection CONFIG: 1 x M8, 4-pin female connector, USB 2.0 (USB-A)</li> <li>Logic editor: yes</li> <li>Communication interface: IO-Link, USB, Ethernet, PROFINET, REST API</li> <li>Product category: IO-Link Master</li> </ul>	SIG200-0A0412200	1089794	

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SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

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Contacts and other locations -www.sick.com

