



MLG05W-0100N12503

MLG-2 WebChecker

MEASURING AUTOMATION LIGHT GRIDS

SICK
Sensor Intelligence.



Illustration may differ



Ordering information

Type	Part no.
MLG05W-0100N12503	1142636

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

Detailed technical data

Features

Device version	Web guiding
Sensor principle	Sender/receiver
Minimum object length	4 mm ¹⁾
Beam separation	5 mm
Resolution	0.1 mm
Cycle time	32 µs per beam
Repeatability	6 µm ²⁾
Accuracy	± 0.3 mm
Type of synchronization	Cable
Number of beams	30
Total measuring field width	145 mm
Measuring field width detailed	
Measuring field width (connection side)	145 mm
Blind zone (medium range)	0 mm
Measuring field width (head side)	0 mm
Software features (default)	
Q ₁ Alarm, general	
Application High resolution mode	
Included with delivery	1 × sender 1 × receiver 1 × Fieldbus module 4/6 × QuickFix brackets (6 × QuickFix brackets for monitoring heights above 2 m) 1 × Quick Start Guide

¹⁾ See graphic: product definition.

²⁾ 1 sigma, 0% object transmission (sensor internal value).

Mechanics/electronics

Light source	LED, Infrared light
Wave length	850 nm
Supply voltage V_s	DC 19.2 V ... 28.8 V ¹⁾
Power consumption sender	56.5 mA ²⁾
Power consumption receiver	126 mA ²⁾
Fieldbus module current consumption	115 mA
Ripple	< 5 V _{pp}
Output current I_{max}	100 mA
Output load, capacitive	100 nF
Output load, Inductive	1 H
Initialization time	< 1 s
Switching output	Push-pull: PNP/NPN
Dimensions (W x H x D)	34 mm x 229.4 mm x 30.6 mm
Connection type	Male connector M12, 5-pin, 0.22 m Connector M12, 12-pin, 0.27 m
Housing material	Aluminum
Indication	LED
Enclosure rating	IP65, IP67 ³⁾
Circuit protection	U _V connections, reverse polarity protected Output Q short-circuit protected Interference pulse suppression
Protection class	III
Weight	0.559 kg
Front screen	PMMA
Option	None
UL File No.	NRKH.E181493

¹⁾ Without load.

²⁾ Without load with 24 V.

³⁾ Operating in outdoor condition only with a external protection housing.

Performance

Maximum range	3.5 m ¹⁾
Minimum range	≥ 0.2 m
Operating range	2.5 m
Response time	7.1 ms ²⁾

¹⁾ No reserve for environmental issue and deterioration of the diode.

²⁾ With resistive load.

Communication interface

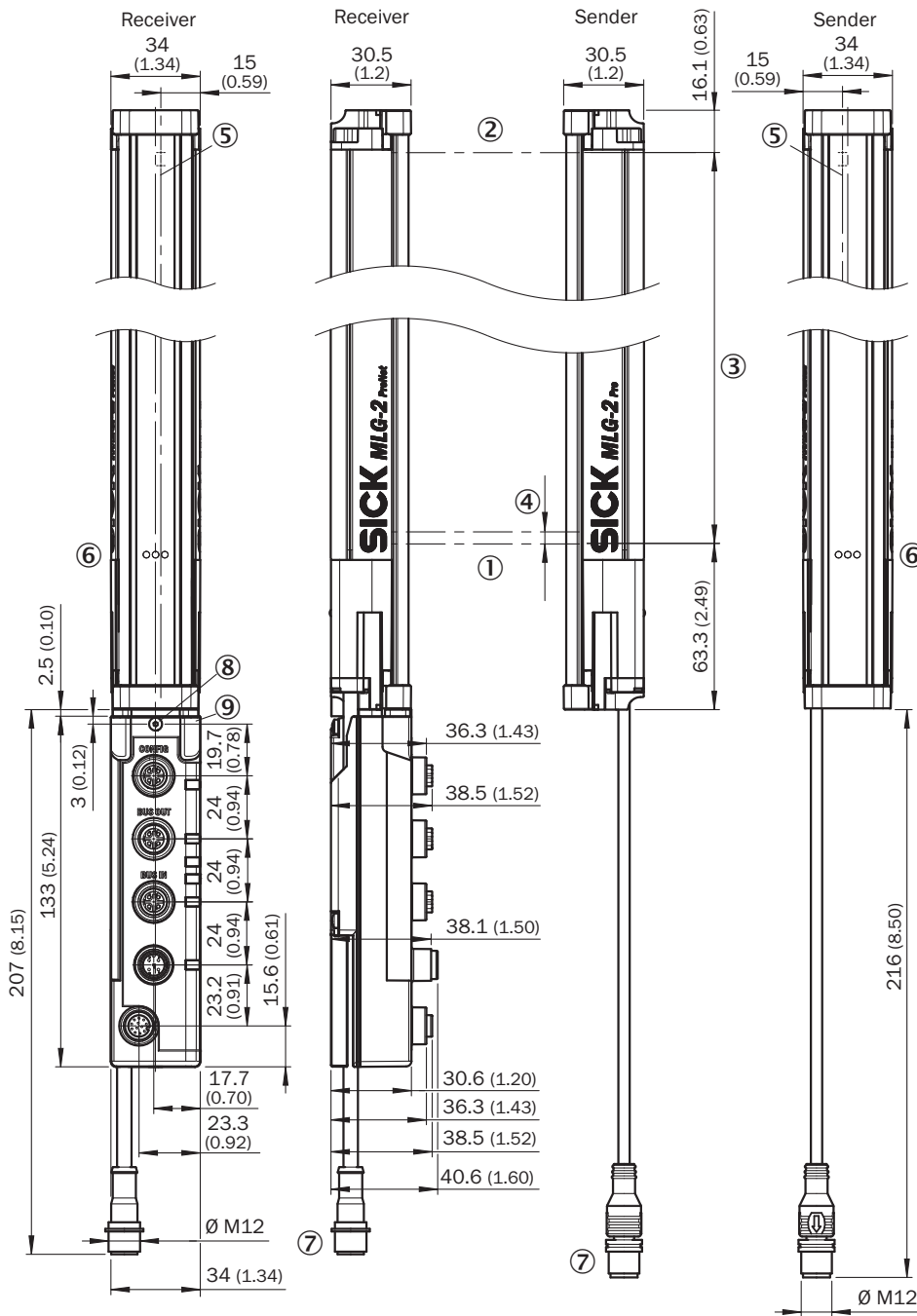
PROFINET	✓
Digital output	Q ₁
Number	1

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

Dimensional drawing (Dimensions in mm (inch))

Dimensional drawing



- ① First beam
- ② Last beam
- ③ Total measuring field width (see technical data)
- ④ Beam separation
- ⑤ Optical axis
- ⑥ Status indicator: green, yellow, red LEDs
- ⑦ Connection

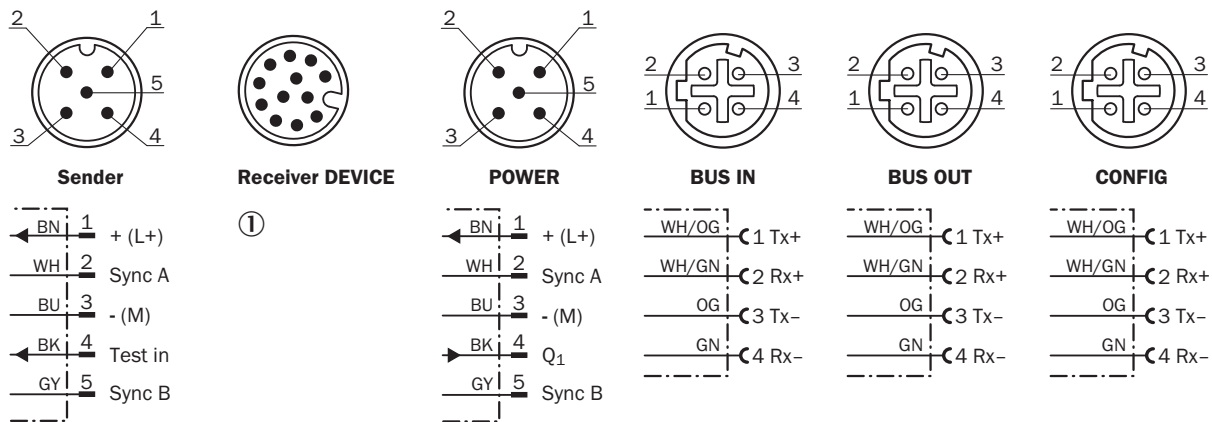
PROFINET, EtherCAT®, EtherNet/IP



- ① Safety screw M4; turning moment 0,5 Nm
- ② For thread bold M4; turning moment 0,5 Nm

Connection type and diagram

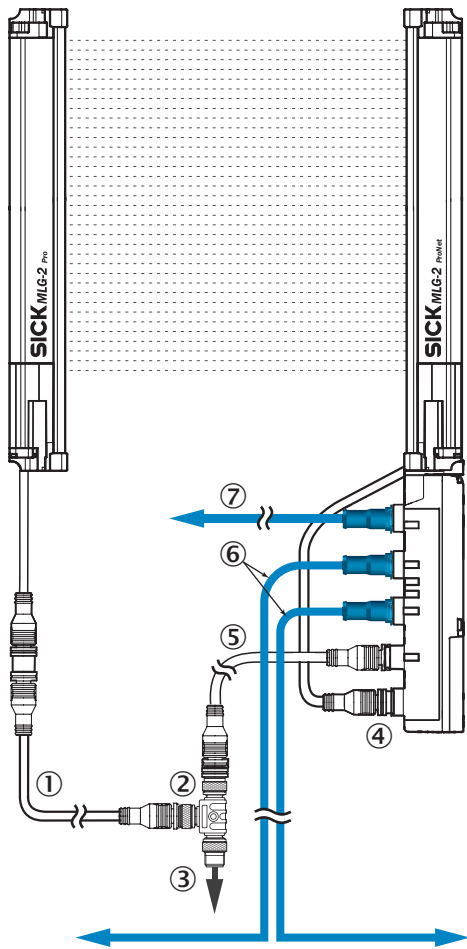
MLG-2 WebChecker



① Connection to fieldbus module

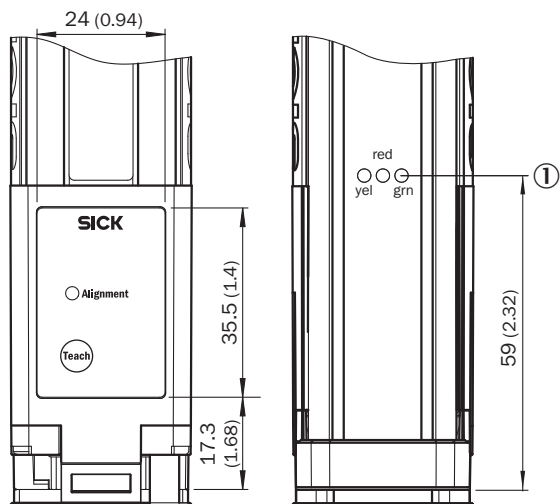
Pinouts

Ethernet



- ① Connection cable receiver (2096010)
- ② T-piece
- ③ Connection cable (2096240)
- ④ Connection receiver "DEVICE"
- ⑤ Connection cable "POWER" (2096010)
- ⑥ Ethernet Connection cable "BUS IN, BUS OUT"
- ⑦ Ethernet connection cable "CONFIG"

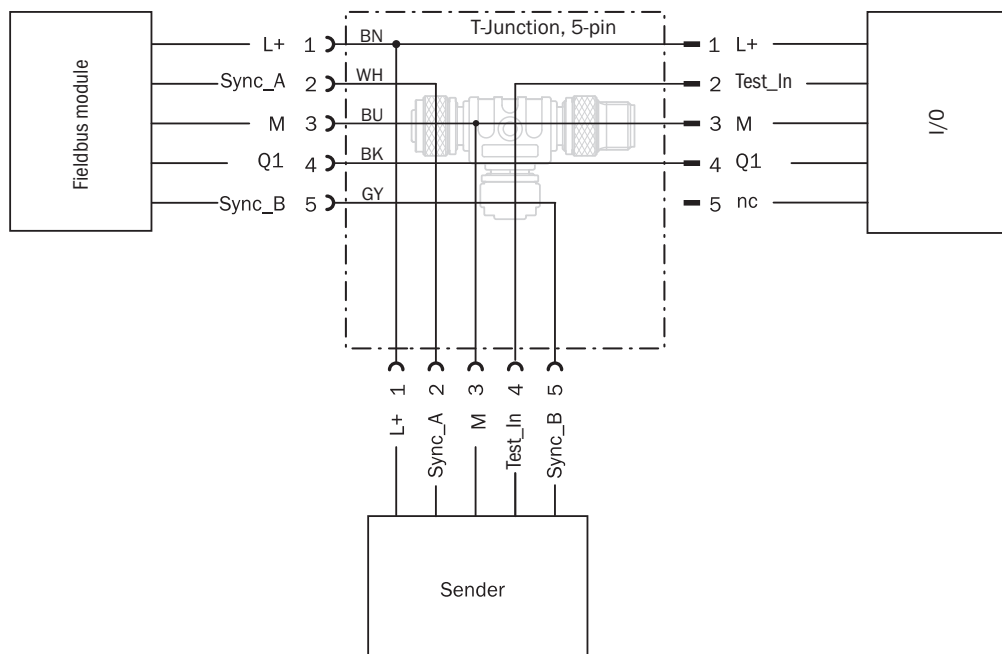
Adjustments



① Status indicator: green, yellow, red LEDs

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)
- ⑥ Sender
- ⑦ Receiver
- ⑧ Beam separation
- ⑨ Minimum object length

SICK AT A GLANCE

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.

For us, that is “Sensor Intelligence.”

WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com