SICK.COM



DATA SHEET

MLG05W-0236H52501

MLG-2 WebChecker
Automation light grids

SICK Sensor Intelligence



Illustration may differ

AUTOMATION LIGHT GRIDS

MLG05W-0236H52501

ORDERING INFORMATION

Type	part no.
MLG05W-0236H52501	1119294

Further device versions and accessories at 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	≥ 0.01 mm
Cycle time	32 µs per beam
Repeatability	6 µm [2]
Accuracy	± 0.3 mm [3]
Type of synchronization	Cable
Number of beams	240
Total measuring field width	1,645 mm
Measuring field width detailed	
Measuring field width (connection side)	295 mm
Blind zone (medium range)	455 mm
Measuring field width (head side)	895 mm
Software features (default)	
Q_1	Alarm, general
Application	Standard mode
Included with delivery	1 × sender (in IP69K protective pipes) 1 × receiver (in IP69K protective pipes) 1 x Fieldbus module 1 x IP69K mounting instructions
Part number of individual components	2122714 MLGR05W-0236F50201, 2122715 MLGT05W-0236F50201

[1] See graphic: product definition.

[2] 1 Sigma, 0% object transmission (internal sensor value).

[3] Typically 0.1 mm. For opaque objects and exact alignment of sender/receiver.

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	67 mA [2]
Power consumption receiver	168 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)	50 mm x 1,880.1 mm x 50 mm
Connection type	Plug, M12, 5-pin, 1.4 m Connector M12, 12-pin, 1.4 m
Housing material	Aluminum (light grid) PMMA Plexiglas XT Food Contact DoC (protective pipe) Polypropylene, stainless steel 1.4404 (cable) VA 1.4305 (pressure compensation element) Stainless steel 1.4404 (end caps) Stainless steel V4A 1.4404 DIN EN 1672-2 (cable gland)
Display	LED
Enclosure rating	IP69K [3]
Circuit protection	U_V connections, reverse polarity protected Output Q short-circuit protected Interference pulse suppression
Protection class	III
Weight	3.559 kg
Option	Protective housing IP69K
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	48.5 ms [2]

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

[2] With resistive load.

INTERFACES

EtherNet/IP™	✓
Digital output	Q_1
Number	1

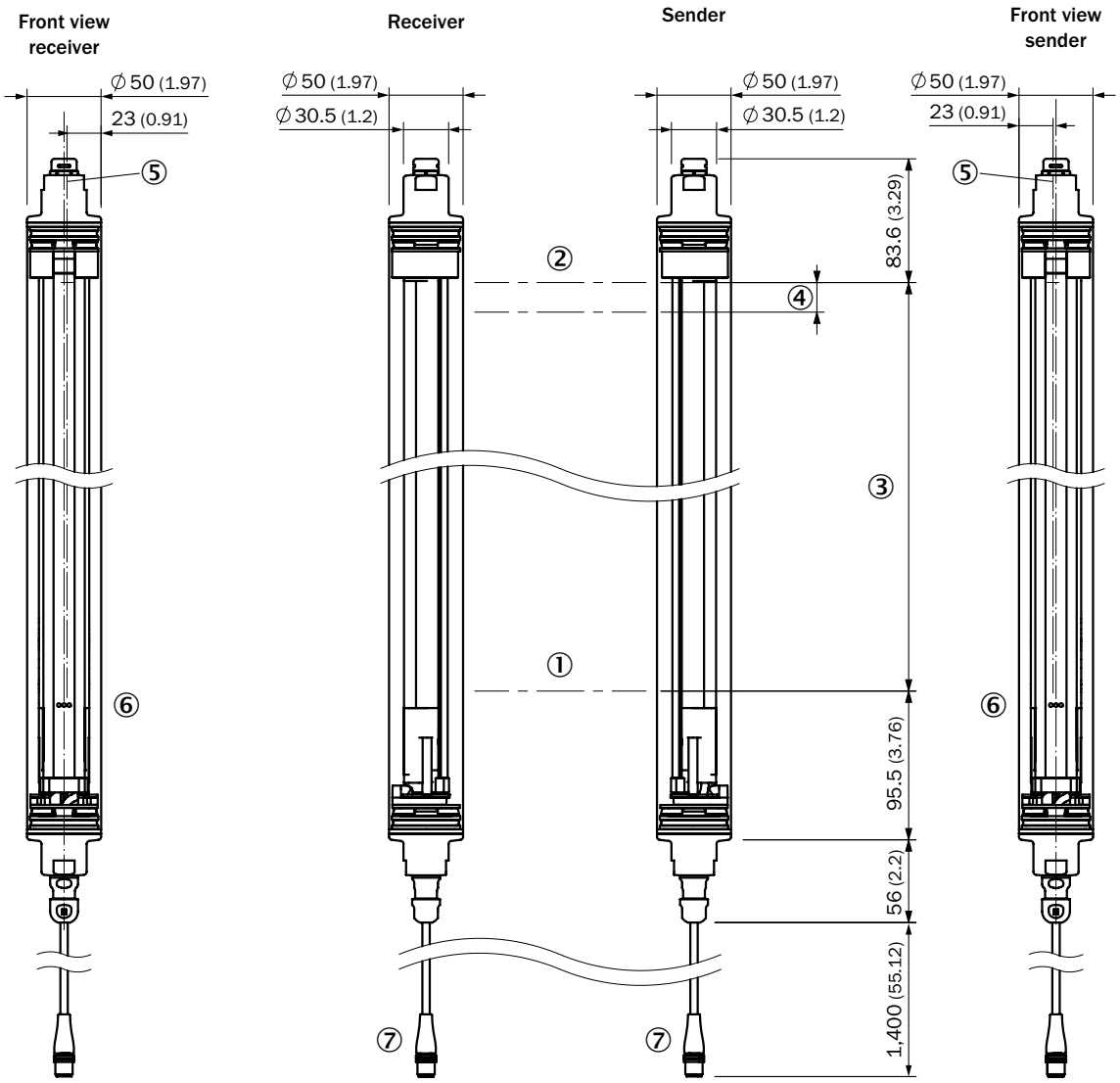
AMBIENT DATA

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	–20 °C ... +55 °C
Ambient temperature, storage	–40 °C ... +70 °C

CERTIFICATES

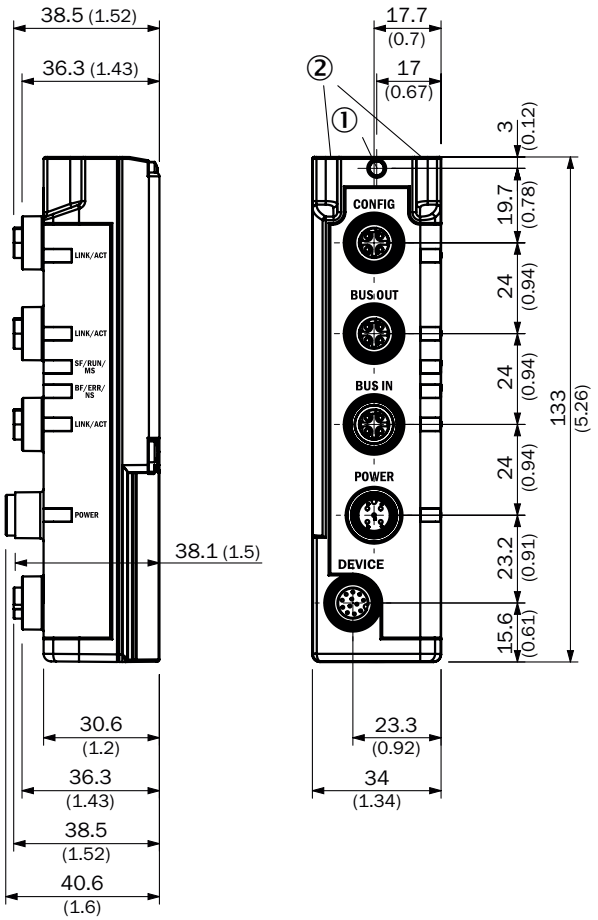
EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓
China RoHS	✓
cULus certificate	✓
Profinet certificate	✓
Photobiological safety (IEC EN 62471)	✓
Information according to Art. 3 of Data Act (Regulation EU 2023/2854)	✓

DIMENSIONAL DRAWING



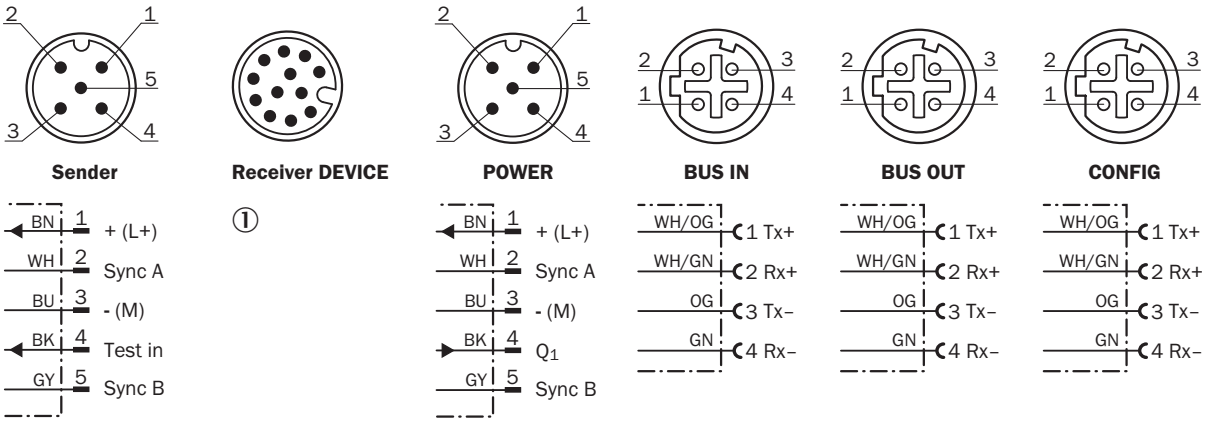
Dimensions in mm (inch)
① First beam
② last beam
③ total measuring field width (see technical data)
④ Beam separation
⑤ Optical axis
⑥ status indicator: green, yellow, red LEDs
⑦ Connection

DIMENSIONAL DRAWING PROFINET, ETHERCAT®, ETHERNET/IP



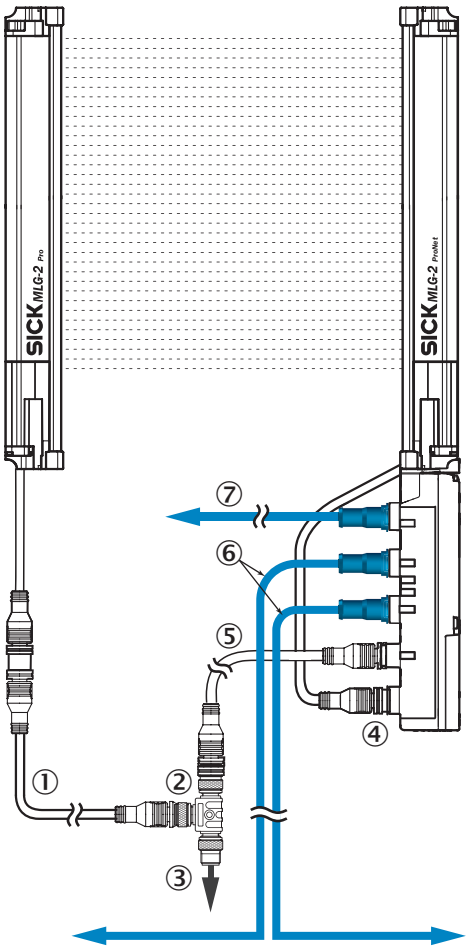
Dimensions in mm (inch)
① safty screw M4; turning moment 0,5 Nm
② for thread bold M4; turning moment 0,5 Nm

CONNECTION TYPE AND DIAGRAM MLG-2 WEBCHECKER



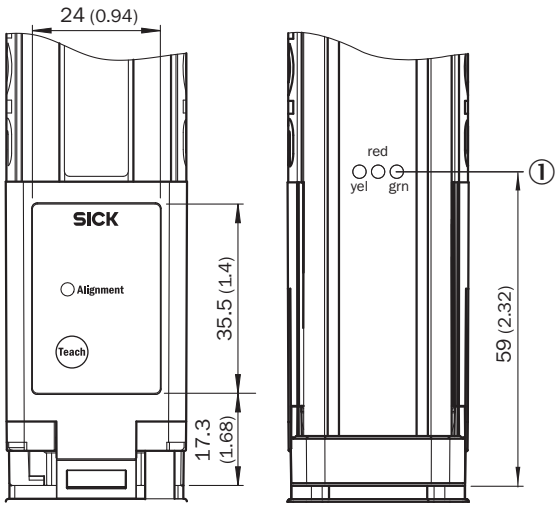
① *Connection to fieldbus module*

PINOUTS ETHERNET



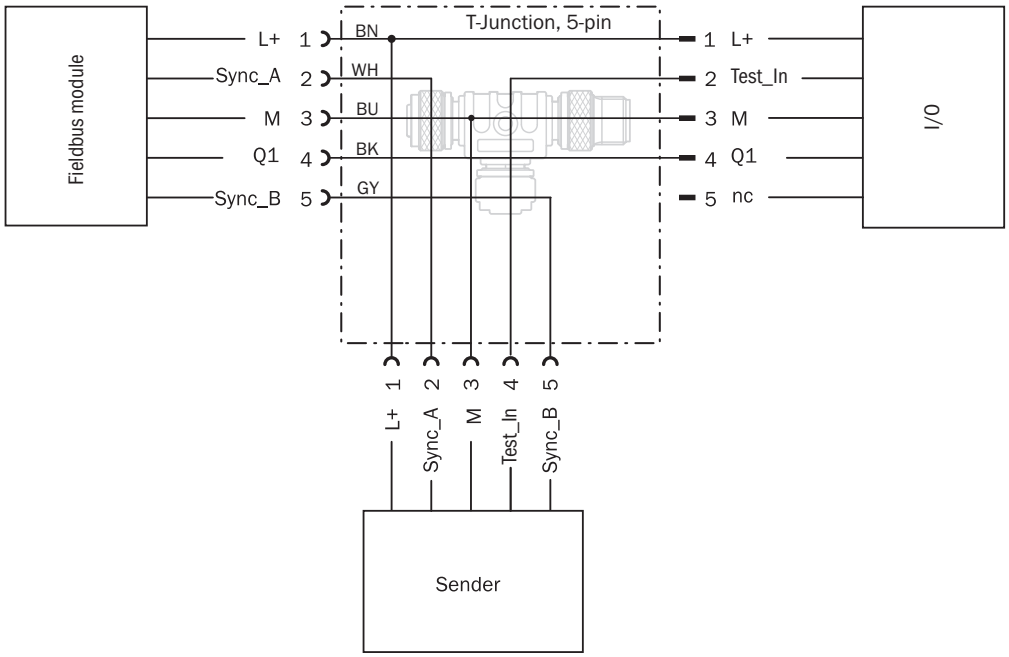
① Connection cable receiver (2096010)
② T-piece
③ Connection cable (2096240)
④ connection receiver “DEVICE”
⑤ Connection cable “POWER” (2096010)
⑥ Ethernet Connection cable “BUS IN, BUS OUT”
⑦ Ethernet connection cable “CONFIG”

ADJUSTMENTS

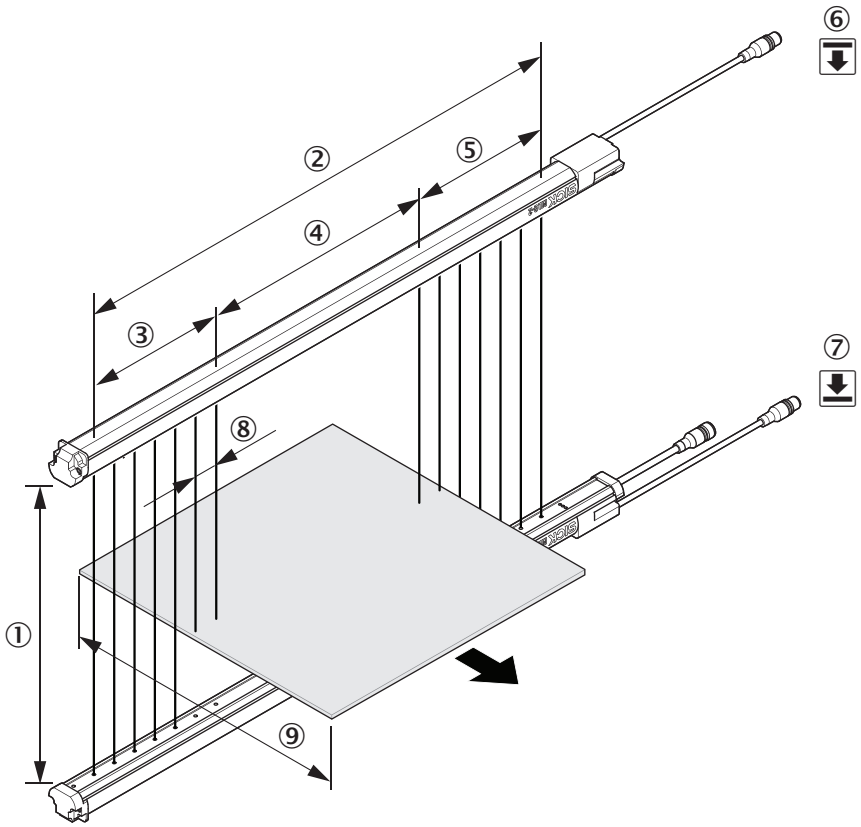


① status indicator: green, yellow, red LEDs

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

Further information as well as suitable accessories, example applications and downloads such as CAD dimensional models, operating instructions and software can be found at www.sick.com/1119294

SICK AG
WALDKIRCH
GERMANY
SICK.COM

SICK AT A GLANCE

SICK is a leading global technology company for intelligent sensors and integrated solutions in industrial automation. Our technologies set benchmarks, making your industrial processes more efficient, safer and more sustainable – both in logistics and manufacturing operations.

SICK combines sensor intelligence with industry expertise and certified consulting services. We provide the ideal foundation for scalable as well as tailor-made automation solutions and create added value along the entire value chain. Our close partnerships with our customers are more than just a promise: Together, we optimize productivity, improve quality, protect health and safety, and help build a sustainable future. All with empathy and trust.

Since 1946, we have been developing innovative technologies with passion and a pioneering spirit. With a global network in around 40 countries, SICK has a global presence and is always close by. The company's headquarters are located in Waldkirch near Freiburg, Germany. Our customers benefit from our understanding of both local and global requirements, which enables us to deliver tailor-made solutions

SICK

Sensor Intelligence