Product data sheet

MLG10S-1190D10501

MLG-2

MEASURING AUTOMATION LIGHT GRIDS

SICK
Sensor Intelligence.

Ordering information

Type	Part no.
MLG10S-1190D10501	1216387

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

Detailed technical data

Features

Device version	Prime - Standard functionality
Sensor principle	Sender/receiver
Minimum detectable object (MDO)	14 mm [1]
Beam separation	10 mm
Number of beams	120
Detection height	1,190 mm
Software features (default)	
Q_1	Auto-define height classification
Q2 / IN	Auto-define height classification
Q_3	Auto-define height classification
inverted	–
Teach	–
key lock	off
Operating mode	
Standard	✓
Function	
Cross beam	✓
Beam blanking	✓
Applications	
Switching output	Object recognition Object recognition Height classification

[1] Depending on beam separation without cross beam setting.

Data interface	Object recognition Object height measurement
Included with delivery	1 × sender 1 × receiver 4/6 x QuickFix brackets (6 x QuickFix brackets for monitoring heights above 2 m) 1 × Quick Start Guide

[1] Depending on beam separation without cross beam setting.

Mechanics/electronics

Light source	LED, Infrared light
Wave length	850 nm
Supply voltage V_S	DC 18 V ... 30 V [1]
Power consumption sender	61 mA [2]
Power consumption receiver	144 mA [2]
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
Connection type	Male connector M12, 5-pin, 0.22 m Male connector M12, 5-pin, 0.22 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	2.649 kg
Front screen	PMMA
Option	None

[1] Without load.
[2] , Without load with 24 V.
[3] Operating in outdoor condition only with a external protection housing.

Performance

Maximum range	7 m [1]
Minimum range	≥ 0.2 m
Operating range	5 m
Response time	14.2 ms

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

Communication interface

IO-Link	✓, IO-Link V1.1
Data transmission rate	38,4 kbit/s (COM2)
Maximum cable length	20 m
Cycle time	6 ms
VendorID	26
DeviceID HEX	800067
DeviceID DEC	8388711
Process data length	6 Byte (TYPE_2_V) [1]
Digital output	Q_1 ... Q_3
Number	3
Digital input	In_1
Number	1

[1] 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

EMC	EN 60947-5-2
Ambient operating temperature	–30 °C +55 °C
Ambient storage temperature	–40 °C +70 °C
Ambient light immunity	Direct: 12,000 lx [1] Indirect: 50,000 lx [2]
Vibration resistance	Sinusoidal oscillation 10-150 Hz 5 g
Shock load	Continuous shocks 10 g, 16 ms, 1000 shocks Single shocks 15 g, 11 ms 3 per axle
UL File No.	NRKH.E181493

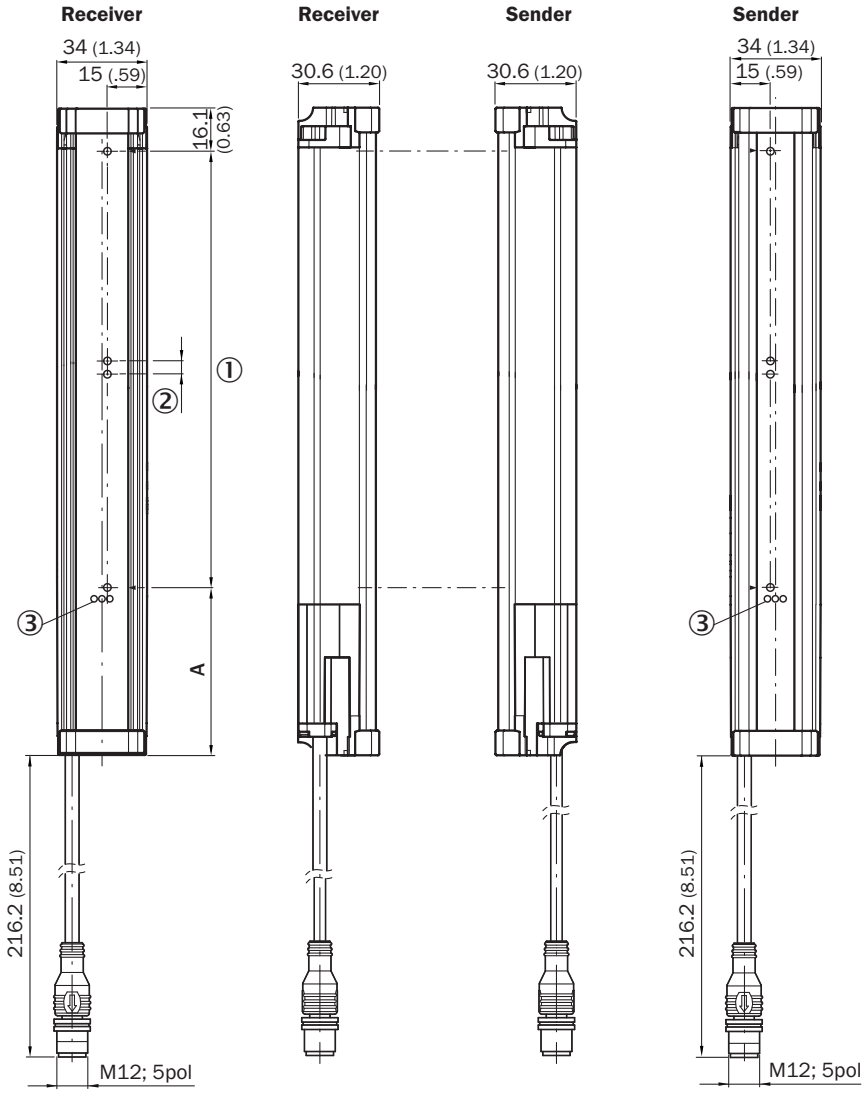
[1] Outdoor mode.
[2] Light resistance indirect.

Classifications

ECl@ss 5.0	27270910
ECl@ss 5.1.4	27270910
ECl@ss 6.0	27270910
ECl@ss 6.2	27270910
ECl@ss 7.0	27270910
ECl@ss 8.0	27270910
ECl@ss 8.1	27270910
ECl@ss 9.0	27270910
ECl@ss 10.0	27270910
ECl@ss 11.0	27270910
ETIM 5.0	EC002549
ETIM 6.0	EC002549
ETIM 7.0	EC002549
UNSPSC 16.0901	39121528

Dimensional drawing (Dimensions in mm (inch))

Dimensional drawing



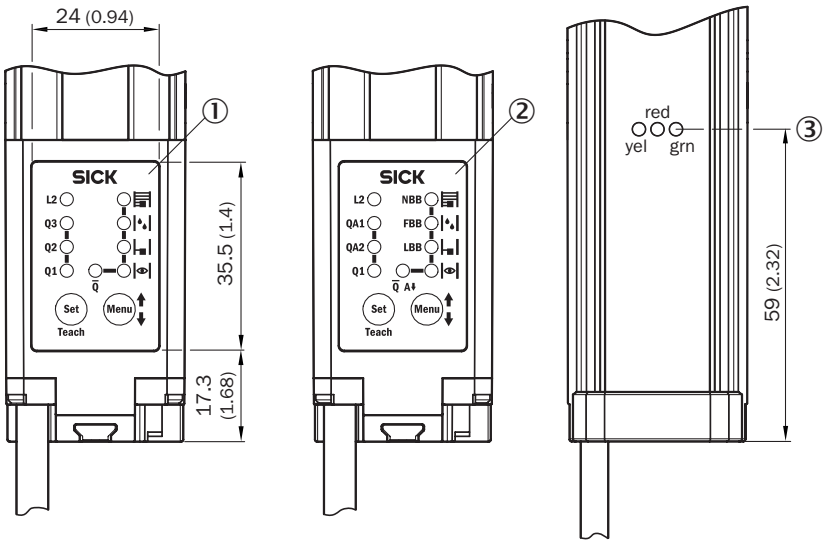
	A [1]
Beam separation 5 mm	63.3 (2.49)
Beam separation 10 mm	68.3 (2.69)
Beam separation 20 mm	68.3 (2.69)/78.3 (3.08) [2]
Beam separation 25 mm	83.3 (3.28)
Beam separation 30 mm	88.3 (3.48)
Beam separation 50 mm	108.3 (4.26)

[1] Distance: MLG edge - first beam
[2] MLG20x-xx**40**: 68.3 mm
MLG20x-xx**80**: 78.3 mm

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

Adjustments

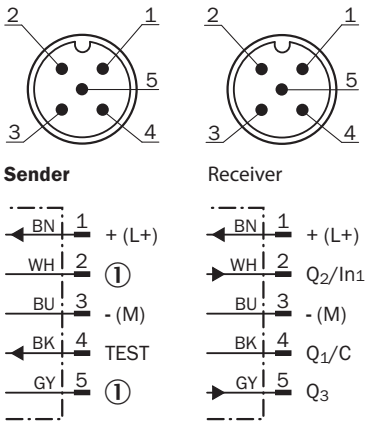
Adjustments



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

Connection type and diagram

Connector M12, 5-pin, switching outputs Q



① Not assigned

Recommended accessories

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

	Brief description	Type	Part no.
SIG200			
	SIG200-0A0412200	SIG200-0A0412200	1089794
	SIG200-0A0G12200	SIG200-0A0G12200	1102605
Plug connectors and cables			
	Head A: female connector, M12, 5-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 5 m	YF2A15-050VB5XLEAX	2096240

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