



MLG0-2380P811S23

MLG

MEASURING AUTOMATION LIGHT GRIDS

SICK
Sensor Intelligence.



Ordering information

Type	Part no.
MLG0-2380P811S23	1056370

Other models and accessories → www.sick.de/MLG



Detailed technical data

Features

Technology	Sender/receiver
Minimum detectable object (MDO)	Parallel beam: 15 mm (10 mm beam separation) ¹⁾ Parallel beam: 30 mm (20 mm beam separation)
Beam separation	10 mm (up to 300 mm detection height), 20 mm (up to 2,380 mm detection height)
Number of beams	≥ 135
Detection height	2,380 mm
Configuration	GSD data file

¹⁾ MDO min. detectable object.

Performance

Maximum range	7 m ¹⁾
Minimum range	Parallel beam: ≥ 0 mm
Working range	5 m
Response time	Parallel beam ≥ 21.25 ms ²⁾

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

²⁾ With resistive load.

Interfaces

Switching output	1 x PNP
Inputs	1 x PNP
Connection type	Male connector M12, 8-pin
Data interface	PROFIBUS
Fieldbus, industrial network	PROFIBUS DP
Type of fieldbus integration	Integrated in the device

Mechanics/electronics

Wave length	950 nm
Supply voltage V_s	DC 18 V ... 30 V ¹⁾
Power consumption sender	$\geq 113.5 \text{ mA}^{2)}$
Power consumption receiver	$\geq 187.5 \text{ mA}^{2)}$
Ripple	10 V _{pp}
Output current I_{max}	$\leq 100 \text{ mA}^{2)}$
Output load capacitive	100 nF
Output load inductive	1 H
Initialization time	1 s
Dimensions (W x H x D)	34 mm x 2,464 mm x 29 mm
Housing material	Aluminum
Indication	LED, 7-segment display
Synchronization	Cable
Enclosure rating	IP 65
Circuit protection	U_V connections, reverse polarity protected, Output Q short-circuit protected, Interference pulse suppression
Weight	$\geq 5.974 \text{ kg}$

¹⁾ Without load.

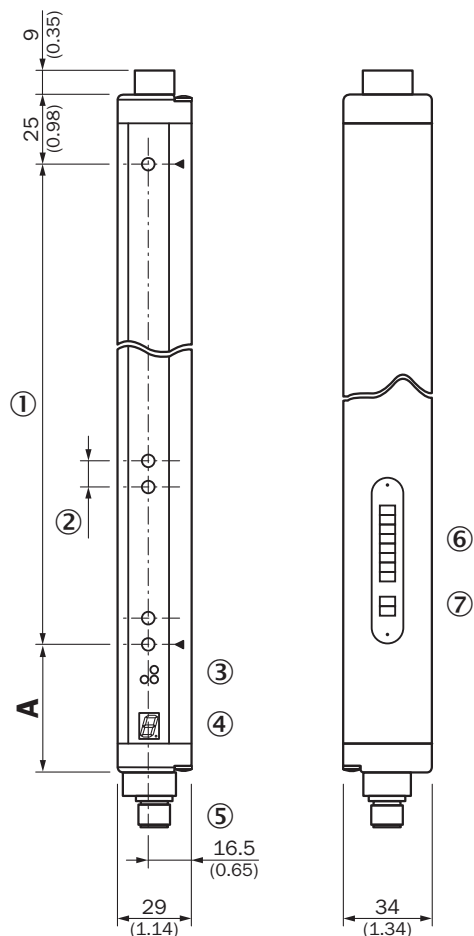
²⁾ Typical value.

Ambient data

Protection class	III
EMC	EN 60947-5-2
Ambient temperature	Operation: $-25 \text{ }^\circ\text{C} \dots +55 \text{ }^\circ\text{C}$ Storage: $-40 \text{ }^\circ\text{C} \dots +70 \text{ }^\circ\text{C}$
Ambient light immunity	Direct: 12,500 lx ¹⁾ Indirect: 50,000 lx ¹⁾
Vibration resistance	5 g, 10 Hz ... 55 Hz (IEC 68-2-6)
Shock load	10 g / IEC 68-2-29 / 16 ms

¹⁾ Sunlight.

Dimensional drawing (Dimensions in mm (inch))



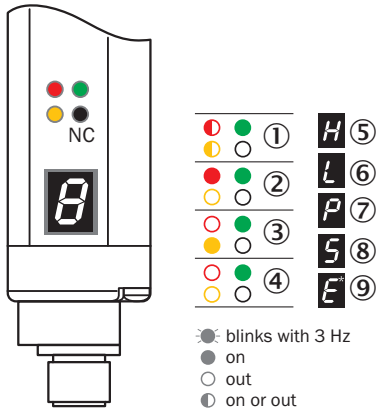
	A
	Distance: MLG edge - first beam
Beam separation 10 mm	49 (1.93)
Beam separation 20 mm	49 (1.93) ¹⁾ / 59 (2.32) ²⁾
Beam separation 30 mm	69 (2.72)
Beam separation 50 mm	89 (3.50)

¹⁾ With even number of beams.
²⁾ With odd number of beams.

- ① Detection height (see optical performance)
- ② Beam separation (10, 20, 30, 50 mm)
- ③ Status indicator: green, yellow, red LEDs
- ④ Indicator panel, 7-segment display
- ⑤ M12 male connector, 8-pin/M12 male connector, 5-pin
- ⑥ Address setting
- ⑦ Bus termination

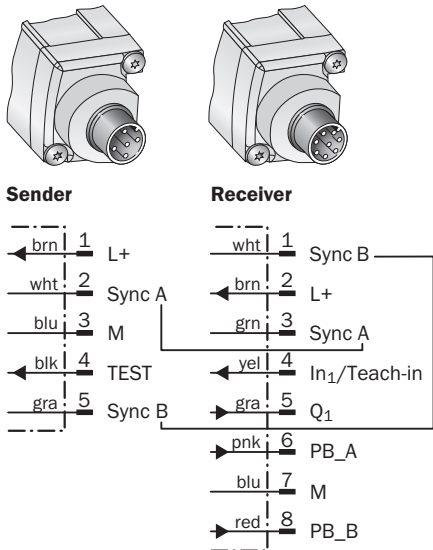
Adjustments

LED indicator













- ① Supply voltage
- ② Device error
- ③ No object in the light path
- ④ Contamination control
- ⑤ Blocked Beams Hold (BBH)
- ⑥ Activated teach-in procedure
- ⑦ ParamMode is active
- ⑧ Standby
- ⑨ Error: E1 = sync. error; E2 = less receiver signal; E9 = defect


Connection type and diagram



Recommended accessories

Other models and accessories → www.sick.de/MLG

	Brief description	Type	Part no.
Mounting brackets and mounting plates			
	Side mounting with T-nuts, 4 pieces, mounting hardware included	BEF-NUT-MLG	2023696
Terminal and alignment brackets			
	4 pieces, Mounting kit 1, rotatable, swivel mount, plastic	BEF-2SMKEAKU4	2019649
Adapters and distributors			
	Male connector M12, 5-pin, straight, A-coded to 2 x female connector M12, 5-pin, straight, A-coded	SBO-02G12-SM	6029305
Plug connectors and cables			
	Head A: female connector, M12, 5-pin, straight Head B: cable Cable: PROFIBUS DP, PUR, halogen-free, shielded, 5 m	DOL-1205-G05MQ	6026006
	Head A: female connector, M12, 5-pin, straight Head B: cable Cable: PVC, unshielded, 10 m	DOL-1205-G10M	6010544
	Head A: female connector, M12, 5-pin, straight Head B: cable Cable: PROFIBUS DP, PVC, shielded, 10 m	DOL-1205-G10MQ	6026008
	Head A: female connector, M12, 5-pin, straight Head B: cable Cable: PVC, unshielded, 15 m	DOL-1205-G15M	6029215
	Head A: female connector, M12, 5-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-1205-W02M	6008900
	Head A: female connector, M12, 5-pin, angled Head B: cable Cable: PVC, unshielded, 5 m	DOL-1205-W05M	6009869
	Head A: female connector, M12, 5-pin, angled Head B: cable Cable: PVC, unshielded, 10 m	DOL-1205-W10M	6010542
	Head A: male connector, M12, 5-pin, straight, B-coded Head B: cable Cable: PROFIBUS DP, drag chain use, PUR, halogen-free, shielded, 5 m Wire shield Al-Pt film, overall shield C-screen tin-plated	STL-1205-G05MQ	6026005
	Head A: male connector, M12, 5-pin, straight, B-coded Head B: cable Cable: PROFIBUS DP, drag chain use, PUR, halogen-free, shielded, 10 m Wire shield Al-Pt film, overall shield C-screen tin-plated	STL-1205-G10MQ	6026007
	Head A: female connector, M12, 5-pin, straight, A-coded Head B: male connector, M12, 5-pin, straight, A-coded Cable: digital I/Os, drag chain use, PUR, halogen-free, unshielded, 5 m	DSL-1205-G05MC	6029282
	Head A: female connector, M12, 5-pin, straight, A-coded Head B: male connector, M12, 5-pin, straight, A-coded Cable: digital I/Os, drag chain use, PUR, halogen-free, unshielded, 10 m	DSL-1205-G10MC	6038954

	Brief description	Type	Part no.
	Head A: female connector, M12, 8-pin, straight Head B: male connector, M12, 5-pin, angled Cable: PROFIBUS DP, PUR, shielded, 0.3 m PROFIBUS-DP adapter cable (PROFIBUS IN, PROFIBUS OUT, and voltage supply, Q1)	ADAPT-PB-WI-MLG	1027901

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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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