



MLG0-3140F822S12

MLG

MEASURING AUTOMATION LIGHT GRIDS

SICK
Sensor Intelligence.



Illustration may differ

Ordering information

Type	Part no.
MLG0-3140F822S12	1012314

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



Detailed technical data

Features

Minimum detectable object (MDO)	Parallel beam, 60 mm
Beam separation	50 mm
Number of beams	63.8
Detection height	3,140 mm
Configuration	Parameterization interface (measuring)

Mechanics/electronics

Wave length	950 nm
Supply voltage V_s	18 V ... 30 V
Power consumption sender	106.38 mA ¹⁾
Power consumption receiver	151.9 mA ¹⁾
Ripple	10 V _{pp}
Output current I_{max}	≤ 100 mA ²⁾
Output load, capacitive	100 nF
Output load, Inductive	1 H
Initialization time	1 s
Switching output	3 x PNP
Inputs	1 x PNP
Dimensions (W x H x D)	34 mm x 3,254 mm x 29 mm
Connection type	Male connector M12, 8-pin
Housing material	Aluminum
Indication	LED, 7-segment display
Synchronization	Cable
Enclosure rating	IP65 ³⁾
Circuit protection	U _V connections, reverse polarity protected Output Q short-circuit protected Interference pulse suppression
Protection class	III

¹⁾ , Typical value.

²⁾ Typical value.

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

Weight	7.722 kg
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- 1) , Typical value.
 2) Typical value.
 3) Operating in outdoor condition only with a external protection housing.

Performance

Maximum range	12 m ¹⁾
Minimum range	Parallel beam: ≥ 0 mm
Operating range	8.5 m
Response time	Parallel beam, 10.57 ms ²⁾

- 1) No reserve for environmental issue and deterioration of the diode.
 2) With resistive load.

Ambient data

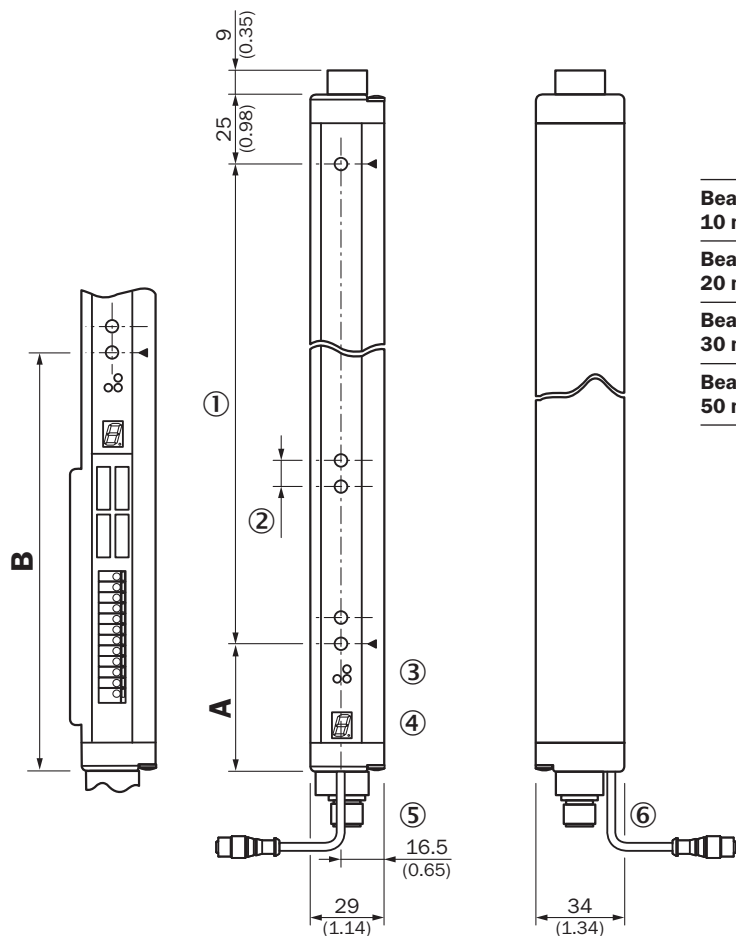
Shock resistance	10 g / IEC 68-2-29 / 16 ms
Vibration resistance	5 g, 10 Hz ... 55 Hz (IEC 68-2-6)
EMC	EN 60947-5-2
Ambient light immunity	Direct: 12,500 lx ¹⁾ Indirect: 50,000 lx ¹⁾
Ambient operating temperature	-25 °C ... +55 °C
Ambient temperature, storage	-40 °C ... +70 °C

- 1) Sunlight.

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
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))



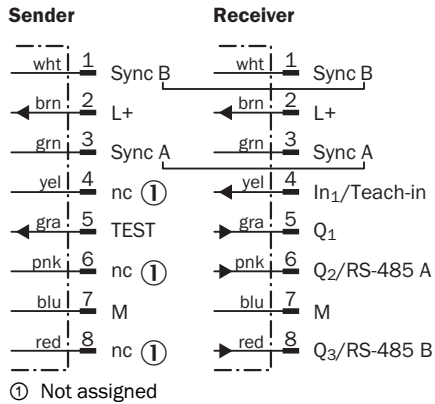
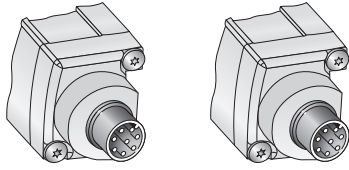
- ① Detection height (see optical performance)
- ② Beam separation (10, 20, 30, 50 mm)
- ③ Status indicator: green, yellow, red LEDs
- ④ Indicator panel, 7-segment display
- ⑤ Terminals: M16 cable entry/connector M12, 12-pin
- ⑥ Configuration connector M8, 4-pin

	A	B
	Distance: MLG edge – first beam	
Beam separation MLG1 10 mm	49 (1.93)	160 (6.30)
Beam separation MLG2 20 mm	49 (1.93) ¹⁾ 59 (2.32) ²⁾	170 (6.69)
Beam separation MLG3 30 mm	69 (2.72)	180 (7.09)
Beam separation MLG5 50 mm	89 (3.50)	200 (7.87)

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

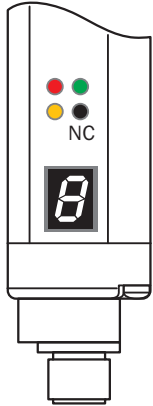
Connection type and diagram

Connection type and diagram



Adjustments

Setting options, receiver





- blinks with 3 Hz
- on
- out
- on or out

- 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

Recommended accessories

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

	Brief description	Type	Part no.
Mounting brackets and plates			
	Side mounting with T-nuts, 4 pieces, mounting hardware included	BEF-NUT-MLG	2023696
	Metal mounting bracket, compact, steel, zinc coated, Set, consisting of 4 pieces, without mounting hardware	BEF-WK-XLG	2029100
Terminal and alignment brackets			
	4 pieces, Mounting kit 1, rotatable, swivel mount, plastic	BEF-2SMKEAKU4	2019649
Others			
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M8, 4-pin, straight • Connection type head B: Female connector, D-Sub, 9-pin, straight • Signal type: Sensor/actuator cable • Cable: 2 m • Description: Sensor/actuator cable, unshielded • Note: Rectangular plug-in system, parameterization cable 	YF8U14-020VA3FDSA9	2023695
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 8-pin, straight, A-coded • Connection type head B: Male connector, M12, 8-pin, straight, A-coded • Signal type: Sensor/actuator cable • Cable: 2 m, 8-wire, PUR, halogen-free • Description: Sensor/actuator cable, shielded • Application: Zones with oils and lubricants, Drag chain operation 	YF2A28-020UA6M2A28	2096105
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 8-pin, straight, A-coded • Connection type head B: Male connector, M12, 8-pin, straight, A-coded • Signal type: Sensor/actuator cable • Cable: 5 m, 8-wire, PUR, halogen-free • Description: Sensor/actuator cable, shielded • Application: Zones with oils and lubricants, Drag chain operation 	YF2A28-050UA6M2A28	2096106
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 8-pin, straight, A-coded • Connection type head B: Male connector, M12, 8-pin, straight, A-coded • Signal type: Sensor/actuator cable • Cable: 10 m, 8-wire, PUR, halogen-free • Description: Sensor/actuator cable, shielded • Application: Zones with oils and lubricants, Drag chain operation 	YF2A28-100UA6M2A28	2096109
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 8-pin, straight, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 2 m, 8-wire, PVC • Description: Sensor/actuator cable, shielded • Application: Zones with chemicals 	YF2A28-020VA6XLEAX	2096243
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 8-pin, straight, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 5 m, 8-wire, PVC • Description: Sensor/actuator cable, shielded • Application: Zones with chemicals 	YF2A28-050VA6XLEAX	2096244
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 8-pin, straight, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 10 m, 8-wire, PVC • Description: Sensor/actuator cable, shielded • Application: Zones with chemicals 	YF2A28-100VA6XLEAX	2096245

	Brief description	Type	Part no.
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 8-pin, angled, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 2 m, 8-wire, PVC • Description: Sensor/actuator cable, shielded • Application: Zones with chemicals 	<p style="text-align: center;">YG2A28-020VA6XLEAX</p>	<p style="text-align: center;">2096218</p>
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 8-pin, angled, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 5 m, 8-wire, PVC • Description: Sensor/actuator cable, shielded • Application: Zones with chemicals 	<p style="text-align: center;">YG2A28-050VA6XLEAX</p>	<p style="text-align: center;">2096219</p>

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:

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