Product data sheet

XLG5-1900I212

XLG

MEASURING AUTOMATION LIGHT GRIDS

SICK
Sensor Intelligence.

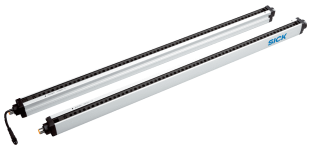


Illustration may differ

Ordering information

Type	Part no.
XLG5-1900I212	1048351

Other models and accessories ➜ www.sick.com/XLG

Detailed technical data

Features

Minimum detectable object (MDO)	Parallel beam, 55 mm [1]
Beam separation	50 mm
Number of beams	39
Detection height	1,900 mm
Configuration	Parameterization interface (measuring)

[1] MDO min. detectable object.

Mechanics/electronics

Light source	Infrared light
Wave length	880 nm
Supply voltage V_S	DC 18 V ... 30 V [1]
Power consumption sender	218 mA [2]
Power consumption receiver	217 mA [2]
Ripple	< 5 V_{pp}
Output current $I_{max.}$	≤ 100 mA [3]
Output load, capacitive	100 nF
Output load, Inductive	1 H
Initialization time	1 s
Switching output	4 x PNP
Inputs	2 x PNP
Dimensions (W x H x D)	34 mm x 2,125 mm x 29 mm
Connection type	Terminals
Housing material	Aluminum
Indication	7-segment display, 7-segment display
Synchronization	Cable
Enclosure rating	IP65 [4]

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

Circuit protection	U_V connections, reverse polarity protected Output Q short-circuit protected Interference pulse suppression
Protection class	III
Weight	4.87 kg
Front screen	PMMA

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

Performance

Maximum range	7 m [1]
Minimum range	Parallel beam: ≥ 0 mm
Operating range	5 m
Response time	Parallel beam, 6.85 ms [2]

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

Communication interface

Inputs/outputs	RS-485

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: 150,000 lx [1] Indirect: 200,000 lx [2]
Ambient operating temperature	–25 °C ... +55 °C
Ambient temperature, storage	–40 °C ... +70 °C

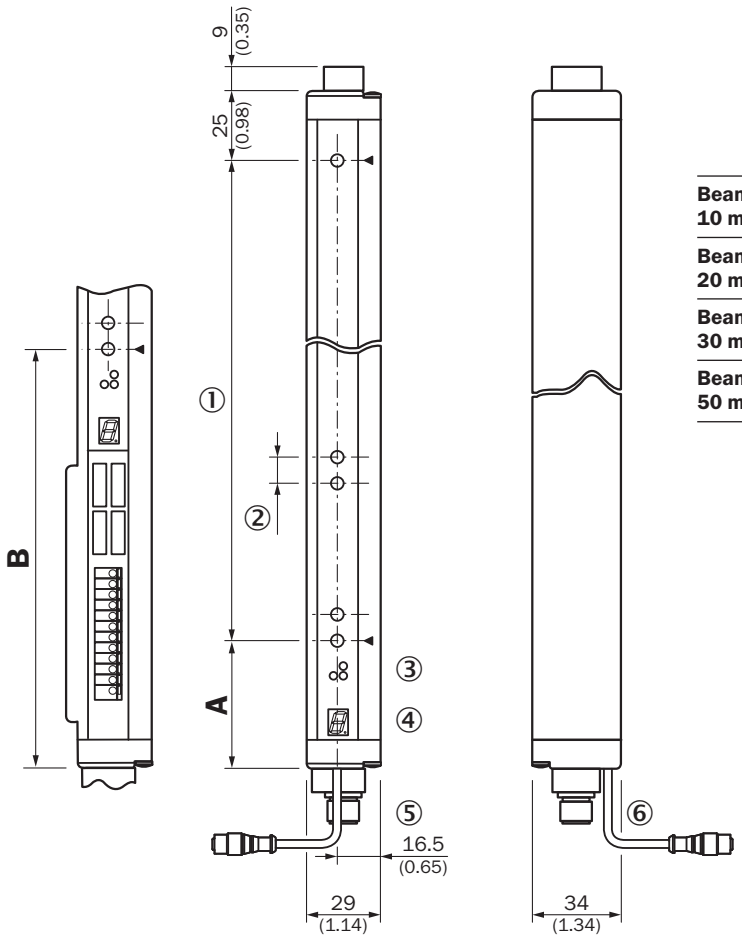
[1] Sunlight.
[2] 200,000 lux up to a sensing range of 5 m and at a sensing range of 12 m 25,000 lux directly.

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))



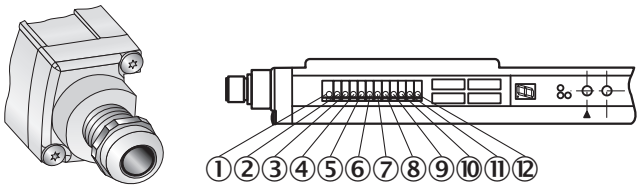
	A Distance: XLG edge – first beam	B Distance: XLG edge – first beam
Beam separation XLG1 **10 mm**	49 (1.93)	160 (6.30)
Beam separation XLG2 **20 mm**	49 (1.93) [1] 59 (2.32) [2]	170 (6.69)
Beam separation XLG3 **30 mm**	69 (2.72)	180 (7.09)
Beam separation XLG5 **50 mm**	89 (3.50)	200 (7.87)

[1] With even number of beams.
[2] With odd number of beams.

① Detection height (see optical performance)
② Beam spacing (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

Connection type and diagram

Connection type and diagram

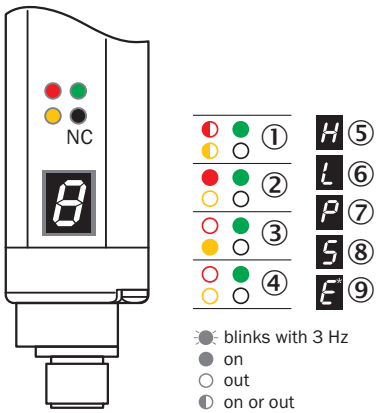


Sender		Receiver	
1	L+	1	L+
2	M	2	M
3	Sync A	3	Sync A
4	Sync B	4	Sync B
5	TEST	5	In_1/Teach-in
6	nc ①	6	In_2
7	nc ①	7	Q_1
8	nc ①	8	Q_2
9	nc ①	9	Q_3
10	nc ①	10	Q_4
11	nc ①	11	Q_5/RS-485 A
12	nc ①	12	Q_6/RS-485 B

① Not assigned

Adjustments

Setting options, receiver



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/XLG

	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			
	• **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
	• **Connection type head A:** Female connector, M12, 8-pin, A-coded • **Connection type head B:** Female connector, M12, 8-pin, A-coded • **Connection type head C:** Male connector, M12, 8-pin, A-coded • **Note:** Male connector M12, 8-pin, straight, to 1 x female connector M12, 8-pin, straight and 1 x female connector M12, 8-pin, straight	SBO-02F12-SM	6029306
	• **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
	• **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
	• **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
	• **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

	Brief description	Type	Part no.
	• **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
	• **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
	• **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	YG2A28-020VA6XLEAX	2096218
	• **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	YG2A28-050VA6XLEAX	2096219

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.”

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