



Measuring automation light grids RS485, XLG, XLG Programmable

XLG1-05901812



Model Name > [XLG1-0590I812](#)
Part No. > [1065368](#)



At a glance

- Up to 6 x PNP or NPN switching outputs and two switching inputs
- Resolutions of 10 / 20 / 30 / 50 mm and customer-specific resolutions
- Working range up to 5 m
- Detection heights of over 3 m and up to 150 beams possible
- Short response time < 3 ms
- External teach-in for optimal sensitivity settings
- Highest immunity to sunlight
- Scratch-resistant front lens

Your benefits

- Highest immunity to sunlight for trouble-free operation
- Intelligent evaluation software saves costs
- Easy-to-see status information helps avoid interrupting operation
- Different beam separation options, detection heights and output configurations ensure a reliable solution



Features

Technology:	Sender/receiver
Minimum detectable object (MDO):	Parallel beam, 15 mm
Beam separation:	10 mm
Number of beams:	60
Detection height:	590 mm
Configuration:	Parameterization interface (measuring)

Performance

Maximum range ¹⁾ :	7 m
Minimum range:	Parallel beam: ≥ 0 mm
Response time ²⁾ :	Parallel beam: ≥ 10 ms
Working range:	5 m

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

Interfaces

Data interface:	RS485
Output type:	1 x PNP
Inputs:	1 x PNP

Connection type: Male connector M12, 8-pin

Mechanics/electronics

Wave length:	IR 880 nm
Supply voltage Vs:	DC 18 V ... 30 V
Power consumption sender ¹⁾ :	260 mA
Power consumption receiver ²⁾ :	280 mA
Output current I _{max} :	100 mA
Output load capacitive:	100 nF
Output load inductive:	1 H
Initialization time:	1 s
Dimensions (W x H x D):	34 mm x 664 mm x 29 mm
Housing material:	Aluminum
Indication:	7-segment display, LED
Synchronization:	Cable
Circuit protection:	Output Q short-circuit protected, Interference suppression, VS connections reverse-polarity protected
Weight:	1.857 kg
Front screen:	PMMA

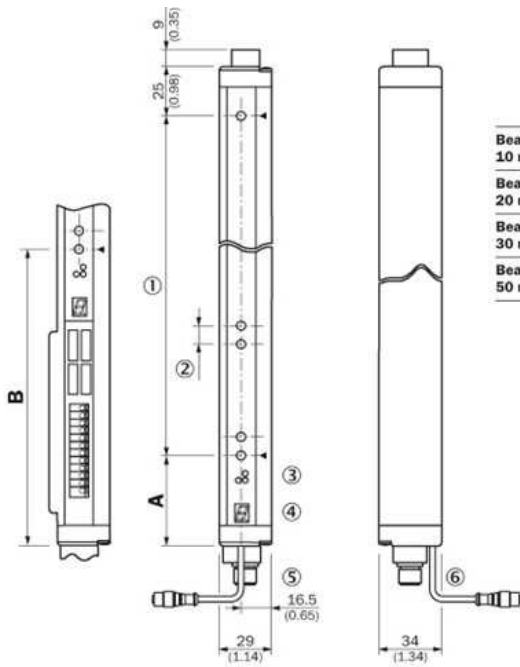
^{1) 2)} Without load with 24 V

Ambient data

Protection class:	III
EMC:	EN 60947-5-2
Ambient temperature:	Operation: -25 ... +55 °C, Storage: -40 ... +70 °C
Ambient light safety ^{1), 2)} :	Direct: ≥150,000 lx, Indirect: ≥200,000 lx
Vibration resistance:	5 g, 10 Hz ... 55 Hz (IEC 68-2-6)
Shock load:	10 g/IEC 68-2-29/16 ms

¹⁾ Sunlight ²⁾

Dimensional drawing

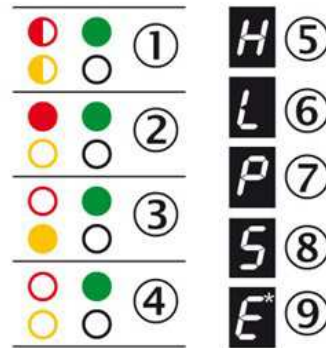
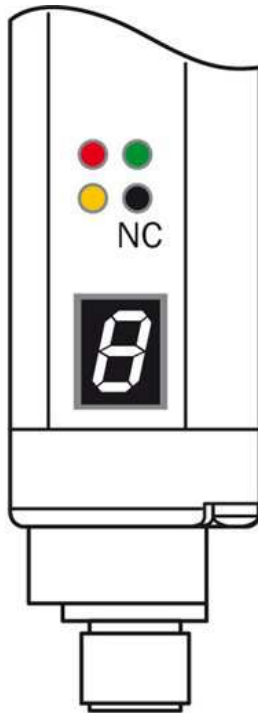


	A	B
	Distance: XLG edge - first beam	
Beam separation XLG1		
10 mm	49 (1.93)	160 (6.30)
Beam separation XLG2		
20 mm	49 (1.93) ¹⁾	170 (6.69) ²⁾
Beam separation XLG3		
30 mm	69 (2.72)	180 (7.09)
Beam separation XLG5		
50 mm	89 (3.50)	200 (7.87)

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: LEDs green, yellow, red
- |4| Indicator panel, 7-segment display
- |5| Terminals: M16 cable entry/connector M12, 12-pin
- |6| Configuration connector M8, 4-pin

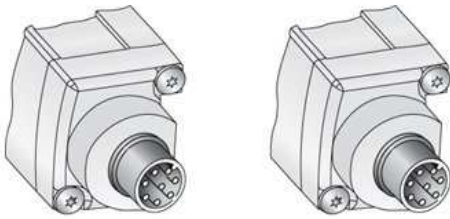
Adjustments receiver



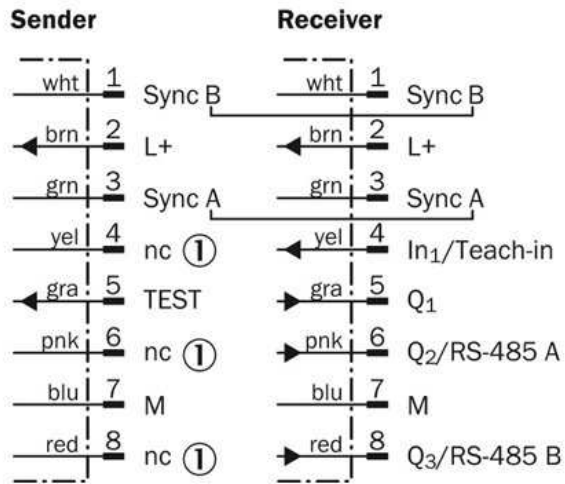
- blinks with 3 Hz
- on
- out
- ◐ on or out

- |1| Supply voltage
- |2| Device error
- |3| No object in the light path
- |4| Pollution indication
- |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



|1| not connected



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