



# WLG12-V537

WLG

SWITCHING AUTOMATION LIGHT GRIDS

**SICK**  
Sensor Intelligence.



Illustration may differ



### Ordering information

Type	Part no.
WLG12-V537	1016045

Other models and accessories → [www.sick.de/WLG](http://www.sick.de/WLG)

### Detailed technical data

#### Features

<b>Technology</b>	Retro-reflective light grid
<b>Minimum detectable object (MDO)</b>	Parallel beam, 6 mm ... 12.5 mm
<b>Beam separation</b>	12.5 mm
<b>Number of beams</b>	≥ 8
<b>Detection height</b>	87.5 mm
<b>Resolution (adjustable)</b>	6 mm ... 12.5 mm <sup>1)</sup>

<sup>1)</sup> Dependence of the range.

#### Performance

<b>Maximum range</b>	1.5 m
<b>Minimum range</b>	≥ 100 mm
<b>Working range</b>	1.5 m
<b>Response time</b>	Parallel beam ≥ 0.6 ms <sup>1)</sup>

<sup>1)</sup> With resistive load.

#### Interfaces

<b>Switching output</b>	1 x PNP (/Q)
<b>Connection type</b>	Male connector M12, 5-pin

#### Mechanics/electronics

<b>Wave length</b>	650 nm
<b>Supply voltage V<sub>s</sub></b>	DC 18 V ... 30 V <sup>1)</sup>
<b>Power consumption sender</b>	≥ 80 mA
<b>Ripple</b>	< 5 V <sub>pp</sub>
<b>Output current I<sub>max.</sub></b>	≤ 100 mA

<sup>1)</sup> Typical value.

<sup>2)</sup> Q = active, if at least one beam is interrupted, /Q = active, if all of the beams are free.

<b>Output load capacitive</b>	100 nF
<b>Output load inductive</b>	1 H
<b>Initialization time</b>	0.6 s
<b>Dimensions (W x H x D)</b>	62 mm x 106 mm x 46.6 mm
<b>Housing material</b>	Plastic
<b>Indication</b>	LED
<b>Enclosure rating</b>	IP 67
<b>Circuit protection</b>	U <sub>V</sub> connections, reverse polarity protected, Output Q short-circuit protected, Interference pulse suppression
<b>Weight</b>	≥ 230 g
<b>Front screen</b>	PMMA
<b>Output mode</b>	Q dark switching <sup>2)</sup>
<b>Teach-in input</b>	PNP

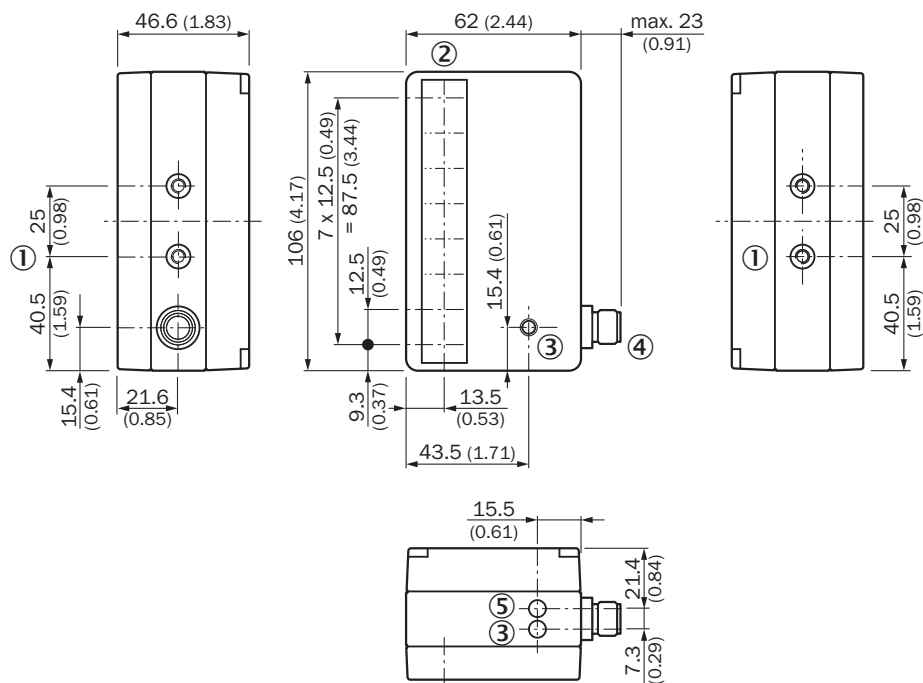
<sup>1)</sup> Typical value.

<sup>2)</sup> Q = active, if at least one beam is interrupted, /Q = active, if all of the beams are free.

### Ambient data

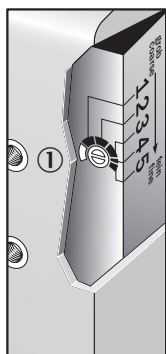
<b>Protection class</b>	II
<b>EMC</b>	EN 60947-5-2
<b>Ambient temperature</b>	Operation: -25 °C ... +55 °C Storage: -20 °C ... +70 °C
<b>Vibration resistance</b>	5 g, 10 Hz ... 55 Hz (IEC 68-2-6)
<b>Shock load</b>	10 g / DIN EN 60068-2-29 / 16 ms

Dimensional drawing (Dimensions in mm (inch))



- ① M5 threaded mounting hole, 6 mm deep
- ② Optic
- ③ Multifunctional display front and top: receive indicator, output weak signal, error during teach-in
- ④ M12 male connector, 5-pin or 2 m cable
- ⑤ Operating indicator

Adjustments



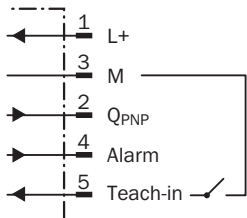
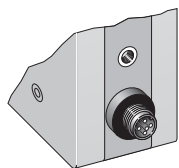
Choice of sensitivity range, dimensions in mm/m (inch)

Potentiometer setting	Resolution	Working range	Reflector
1	> 12.5 mm (0.49)	1.5 m (59.06)	2 x PL80A/PL40A
2	> 10 mm (0.39)	1.2 m (47.24)	2 x PL80A/PL40A
3	> 9 mm (0.35)	1.0 m (39.37)	PL180E01
4	> 7 mm (0.28)	0.8 m (31.50)	PL180E01
5	> 6 mm (0.24)	0.4 m (15.75)	PL180E01

- ① Potentiometer for sensitivity adjustment





### Connection type and diagram

WLG12-V537/WLG12-P537 M12 plug, 5-pin



### Recommended accessories

Other models and accessories → [www.sick.de/WLG](http://www.sick.de/WLG)

	Brief description	Type	Part no.
<b>Plug connectors and cables</b>			
	Head A: female connector, M12, 5-pin, straight Head B: cable Cable: PVC, unshielded, 5 m	DOL-1205-G05M	6009868
<b>Reflectors</b>			
	Rectangular, self-adhesive, 146 mm x 14 mm, PMMA/ABS, self-adhesive	PL150	5315548
	Rectangular, screw connection, 175 mm x 34 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL180E01	1013289
	Rectangular, screw connection, 80 mm x 80 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL80A	1003865

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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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