



Switching automation light grids WLG

WLG12-V537



Model Name > **WLG12-V537**
Part No. > **1016045**



Illustration may differ

At a glance

- The direct output of individual beams for measuring and switching
- Response time 0.6 ms
- Eight visible transmission LEDs
- Eight PNP switching outputs and one alarm output
- Sensitivity can be set via a potentiometer
- Polarizing filter for reflective surfaces

Your benefits

- The WLG's fast response time keeps up with increased conveyor speeds, increasing throughput
- Detects translucent and semi-transparent objects for consistent detection of most objects
- Retro-reflective sensor saves space, installation time and cost
- Polarized retro-reflective light grids are designed to detect difficult reflective targets, such as stretch wrap and other thin films
- Visible red light reduces assembly time
- Multiple output versions indicate detection position and size of the object for closed loop process feedback and inspection



Features

Technology:	Retro-reflective light grid
Task:	Switching light grid
Minimum detectable object (MDO):	Parallel beam, 6 mm ... 12.5 mm
Beam separation:	12.5 mm
Number of beams:	8
Detection height:	87.5 mm
Resolution (adjustable) ¹⁾ :	6 mm ... 12.5 mm

¹⁾ Dependence of the range

Performance

Maximum range:	1.5 m
Minimum range:	≥100 mm
Working range:	1.5 m
Response time ¹⁾ :	Parallel beam: ≥0.6 ms

¹⁾ With resistive load

Interfaces

Output type: 1 x PNP (/Q)
Connection type: Connector M12, 5-pin

Mechanics/electronics

Wave length: 650 nm
Supply voltage V_s ¹⁾: DC 18 V ... 30 V
Power consumption sender: 80 mA
Ripple: < 5 Vpp
Output current $I_{max.}$: 100 mA
Output load capacitive: 100 nF
Output load inductive: 1 H
Initialization time: 0.6 s
Dimensions (W x H x D): 62 mm x 106 mm x 46.6 mm
Housing material: Plastic
Indication: LED
Enclosure rating: IP 67
Circuit protection: Output Q short-circuit protected
Interference suppression
VS connections reverse-polarity protected

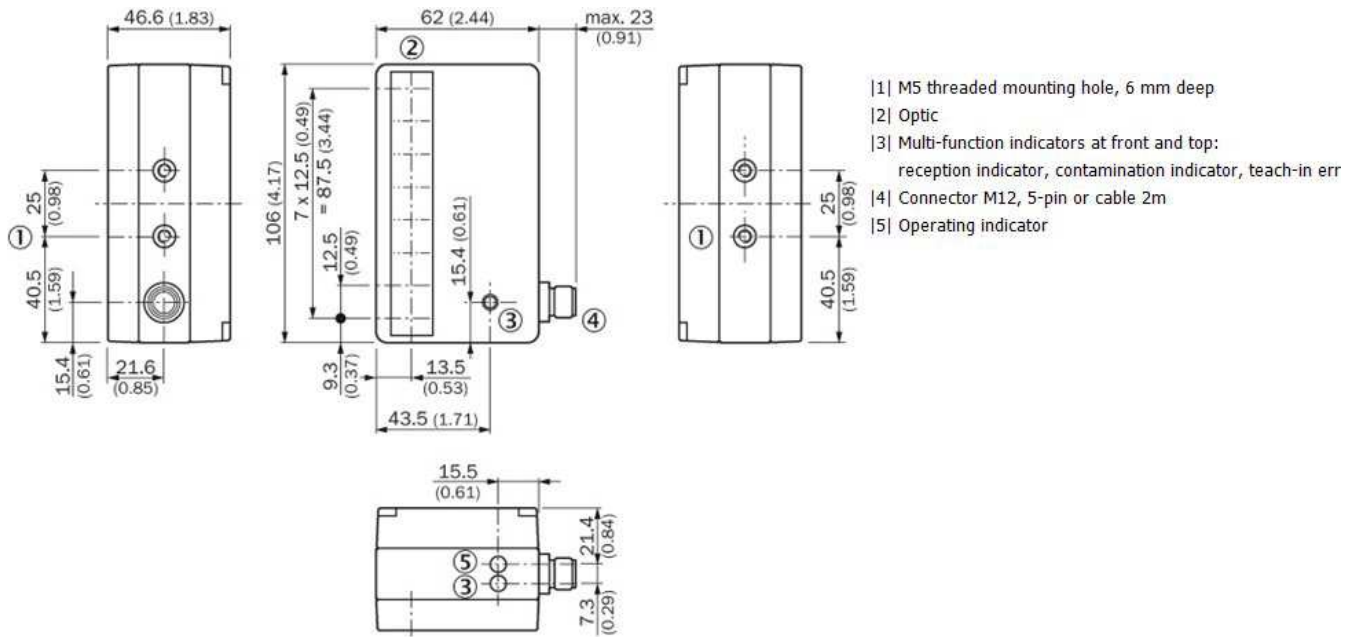
Weight: 230 g
Front screen: PMMA
Output mode ²⁾: Q dark switching
Teach input: PNP

¹⁾ Typical value ²⁾ Q = active in case one beam is interrupted, /Q = active in case all beam are free

Ambient data

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

Dimensional drawing



Adjustments

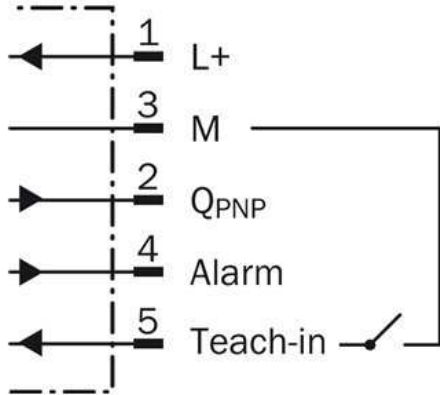
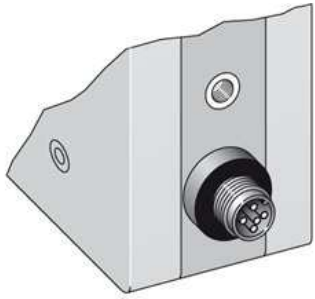


Choice of sensitivity range, dimensions in mm/m (inch)

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



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