



Standard automation light grids WLG

WLG12-G137



Model Name > [WLG12-G137](#)
Part No. > [1016046](#)



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⁾ :	1.5 m
Response time ¹⁾ :	Parallel beam: ≥0.6 ms

¹⁾ With resistive load

Interfaces

Output type:	8 x PNP Q und Alarm
Connection type:	Cable 12-pin

Mechanics/electronics

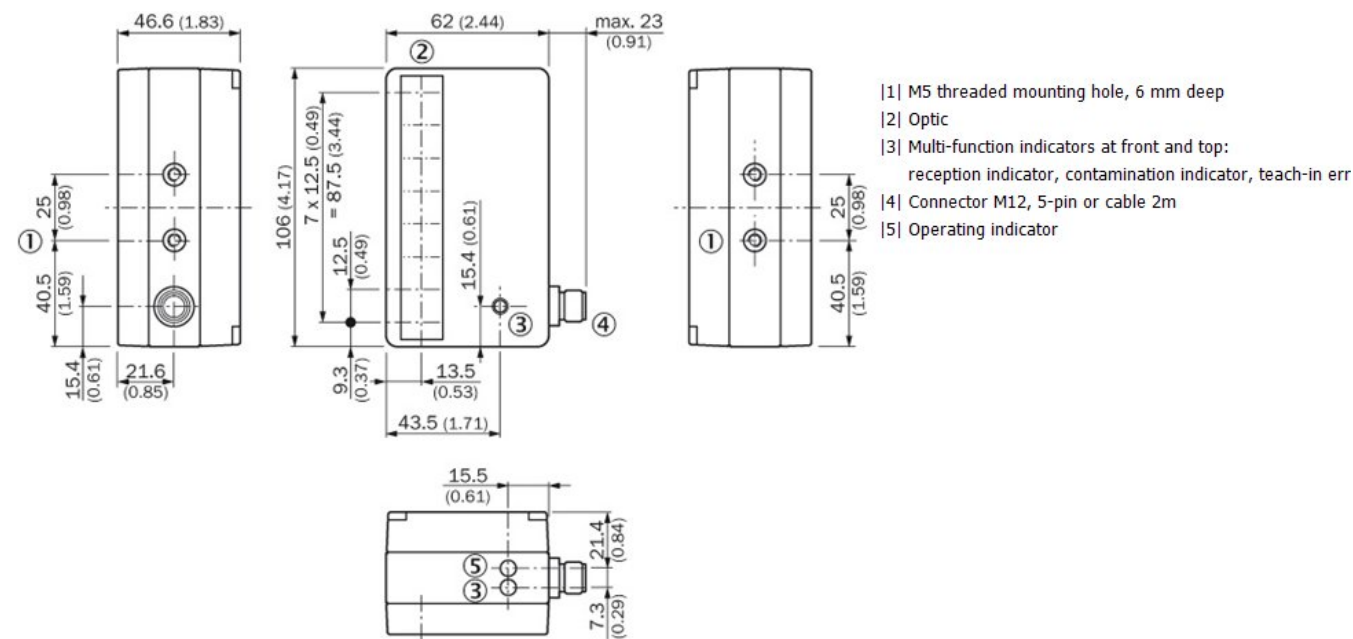
Wave length:	650 nm
Supply voltage Vs ¹⁾ :	DC 18 V ... 30 V
Power consumption:	80 mA
Power consumption sender:	80 mA
Ripple:	< 5 Vpp
Output current I _{max} :	100 mA
Output load capacitive:	100 nF
Output load inductive:	1 H
Initialization time:	0.6 s
Dimensions (W x H x D):	62 mm x 106 mm x 46.6 mm
Housing 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

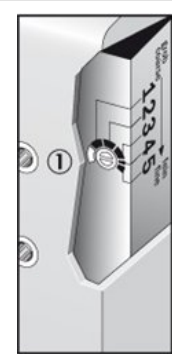
Ambient data

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

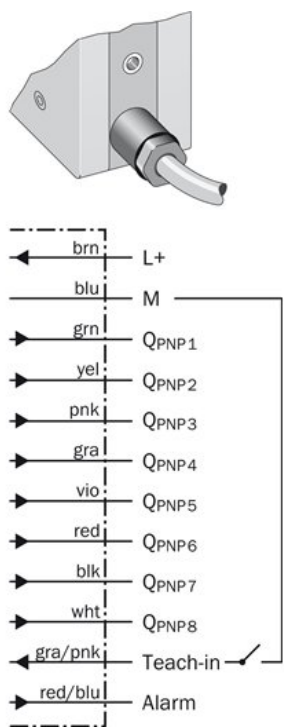


Choice of sensitivity range, dimensions in mm/m (inch)

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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