



Standard automation light grids HLG

HLG2-050F811



Model Name > [HLG2-050F811](#)
Part No. > [1029853](#)



At a glance

- 2 mm resolution
- Response time 3 ms
- Detection height 50 mm
- Cable synchronization
- PNP or NPN with both Q and Qnot outputs (NO/NC)
- 1 x test, 1 x teach-in input
- Connector M12, 8-pin

Your benefits

- Reliable object detection throughout the entire working range ensures consistent and reliable operation
- High availability thanks to its ability to detect very flat objects
- The HLG's short response time allows the use of higher conveyor speeds directly leading to higher throughput
- Cable synchronization provides more reliable use and higher machine uptime
- Highest measurement resolution provides smallest minimum detectable object size, for exact counting and true leading edge detection of conveyed objects, for more machine control and increased throughput



Features

Technology:	Sender/receiver
Task:	Switching light grid
Minimum detectable object (MDO):	Parallel beam: ≥ 2 mm
Beam separation:	2 mm
Number of beams:	26
Detection height:	50 mm

Performance

Maximum range:	2 m
Minimum range:	≥ 0 mm
Working range:	1.5 m
Response time ¹⁾ :	Parallel beam: 3 ms

¹⁾ With resistive load

Interfaces

Output type:	2 x PNP (Q and /Q)
Connection type:	Connector M12, 8-pin

Mechanics/electronics

Wave length:	950 nm
Supply voltage Vs ¹⁾ :	DC 15 V ... 30 V
Power consumption ²⁾ :	< 100 mA
Power consumption sender ³⁾ :	< 100 mA
Power consumption receiver ⁴⁾ :	> 100 mA
Ripple:	< 5 Vpp
Output current I _{max} :	100 mA
Output load capacitive:	100 nF
Output load inductive:	1 H
Initialization time:	0.8 s
Dimensions (W x H x D):	34 mm x 123 mm x 29 mm
Housing material:	Aluminum
Indication:	LED
Synchronization:	Cable
Enclosure rating:	IP 54
Circuit protection:	Output Q short-circuit protected Interference suppression VS connections reverse-polarity protected
Weight:	135 g
Front screen:	PMMA
Output mode ⁵⁾ :	Q dark switching
Teach input:	PNP

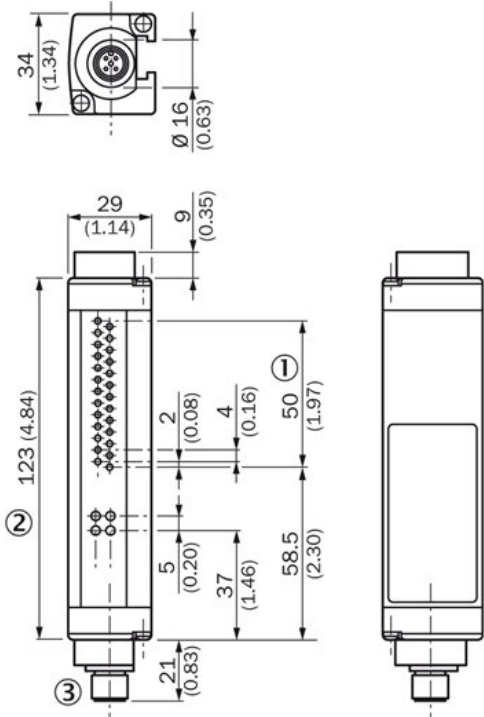
^{1) 2) 3) 4)} Typical value ⁵⁾ Q = active in case one beam is interrupted, /Q = active in case all beam are free

Ambient data

Protection class:	III
EMC:	EN 60947-5-2
Ambient temperature:	Operation: -25 ... 55 °C Storage: -40 ... 70 °C
Ambient light safety ¹⁾ :	Indirect: ≤ 50,000 lx
Vibration resistance:	5 g, 10 Hz ... 55 Hz (IEC 68-2-6)
Shock load:	10 g/DIN EN 60068-2-29/16 ms

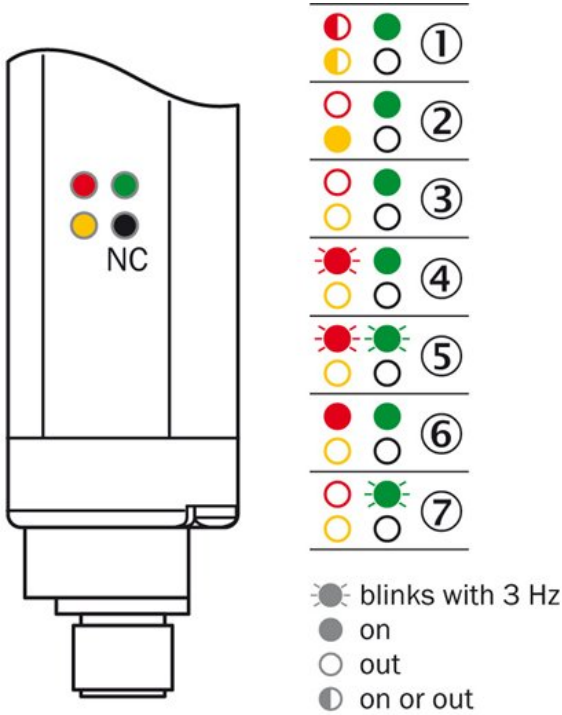
¹⁾ Sunlight

Dimensional drawing



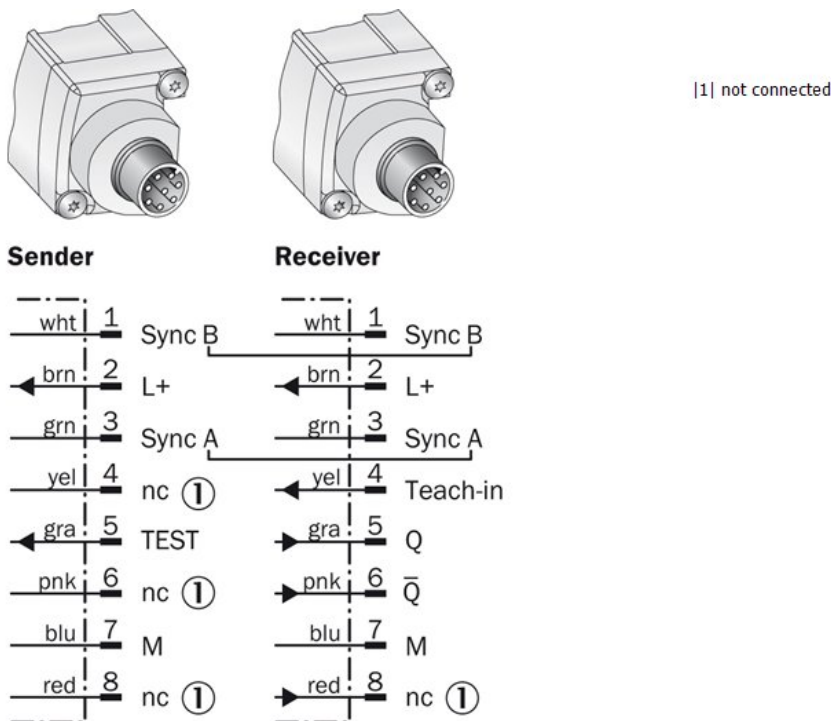
- |1| Detection height: 50 mm
- |2| Status indicator/power on
- |3| Connector M12, 8-pin

Adjustments receiver

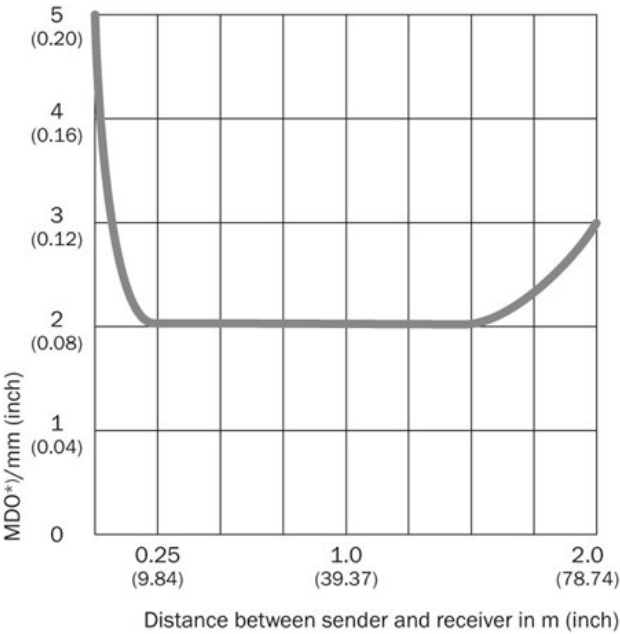


- |1| Supply voltage
- |2| No object in the light path
- |3| Light path interrupted
- |4| Synchronization error
- |5| Less received signal during teach-in
- |6| Device error
- |7| Activated teach-in procedure

Connection type and diagram



Characteristic curve: MDO



*) MDO: Minimum detectable object size measured in a direction parallel to the HLG

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