



FLG2-20025011

FLG

SWITCHING AUTOMATION LIGHT GRIDS

SICK
Sensor Intelligence.



Illustration may differ



Ordering information

| Type | Part no. |
|---------------|----------|
| FLG2-20025011 | 6049138 |

Other models and accessories → www.sick.de/FLG

Detailed technical data

Features

| | |
|--|---|
| Version | Close |
| Technology | Sender/receiver |
| Minimum detectable object (MDO) | Dynamic: 2 mm ¹⁾ Static: 6 mm |
| Beam separation | 2 mm |
| Output function | Light/dark switching adjustable by means of rotary switch |

¹⁾ 2 mm MDO in limited detection area.

Performance

| | |
|-------------------------------|-------------------------------|
| Detection area (W x H) | 250 mm x 200 mm ¹⁾ |
| Response time | < 0.1 ms |

¹⁾ 2 mm MDO in limited detection area.

Interfaces

| | |
|-------------------------|---------------------------|
| Switching output | PNP/NPN (Q and /Q) |
| Connection type | M12, 4-pin male connector |

Mechanics/electronics

| | |
|--|--------------------------------|
| Wave length | 880 nm |
| Supply voltage V_s | DC 18 V ... 30 V ¹⁾ |
| Ripple | < 10 % |
| Output current I_{max.} | ≤ 100 mA |
| Off delay | 0 s ... 5 s ²⁾ |
| Initialization time | 0.3 s |
| Dimensions (W x H x D) | 312 mm x 230 mm x 25 mm |
| Housing material | Aluminum, painted |

¹⁾ Limit values, reverse-polarity protected, operation in short-circuit protected network: max. 8 A.

²⁾ Adjustable.

| | |
|----------------------------|--|
| Indication | LED |
| Enclosure rating | IP 65 |
| Circuit protection | U _V connections, reverse polarity protected, Output Q short-circuit protected, Interference pulse suppression |
| Weight | ≥ 0.86 kg |
| Switching frequency | ≤ 5,000 Hz |

¹⁾ Limit values, reverse-polarity protected, operation in short-circuit protected network: max. 8 A.

²⁾ Adjustable.

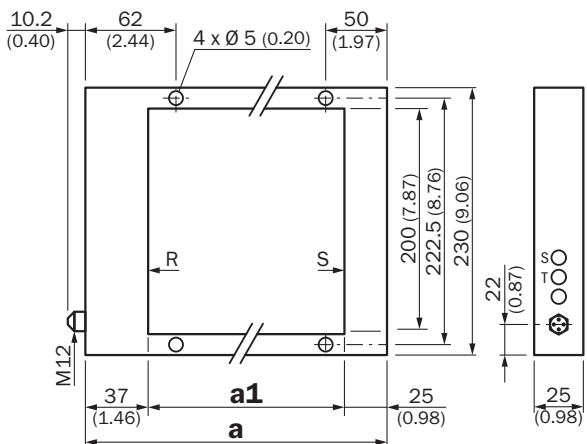
Ambient data

| | |
|-------------------------------|--|
| Protection class | III |
| EMC | EN 60947-5-2 |
| Ambient temperature | Operation: 0 °C ... +60 °C ¹⁾ Storage: -20 °C ... +80 °C |
| Ambient light immunity | Sunlight: 10,000 lx |
| Vibration resistance | EN 60068-2-6 |
| Shock load | EN 60068-2-27 |

¹⁾ In static mode: constant temperature around teaching point will be assumed.

Dimensional drawing (Dimensions in mm (inch))

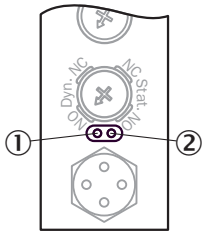
FLGx-200xxx1x



| | a | a1 |
|----------------------|-------------|------------|
| FLGx-200120xx | 182 (7.17) | 120 (4.72) |
| FLGx-200180xx | 242 (9.53) | 180 (7.09) |
| FLGx-200250xx | 312 (12.28) | 250 (9.84) |

Adjustments

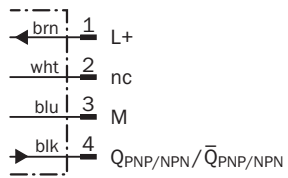
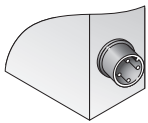
Indication LED



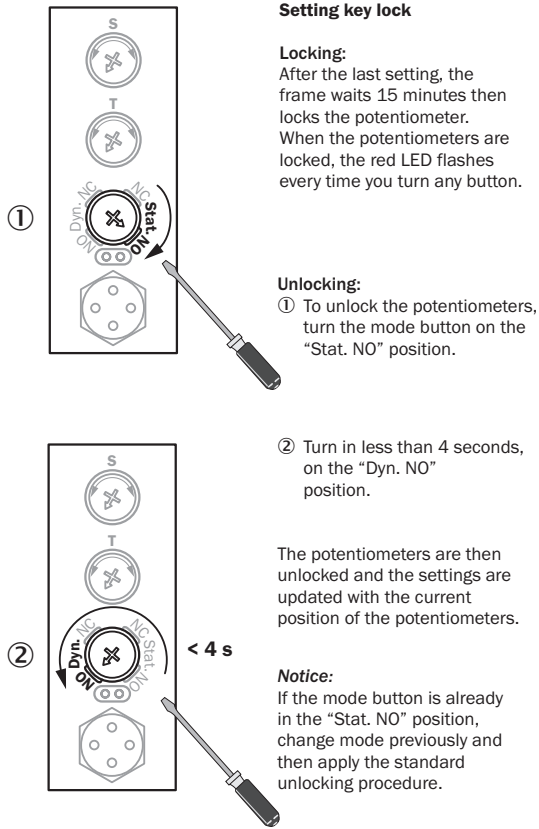
- ① Yellow LED: status output
- ② Red LED: error or button lock active (blinking)

Connection type and diagram

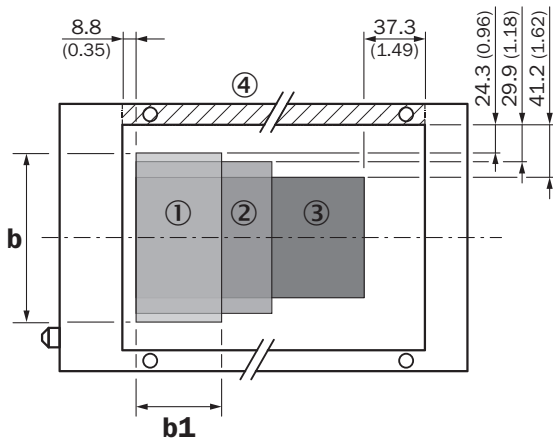
M12, 4-pin male connector



Concept of operation



Diagramm



Dimensions in mm (inch)


| | b | b1 |
|-----------------|--------------|--------------|
| ① FLG2-xxx120xx | 151.4 (5.96) | 73.9 (2.91) |
| ② FLG2-xxx180xx | 140.2 (5.52) | 133.9 (5.27) |
| ③ FLG2-xxx250xx | 117.6 (4.63) | 203.9 (8.03) |

All dimensions in mm (inch)

④ Side is missing in open version

Recommended accessories

Other models and accessories → www.sick.de/FLG

| | Brief description | Type | Part no. |
|---|--|---------------|----------|
| Plug connectors and cables | | | |
|  | Head A: female connector, M12, 4-pin, straight Head B: cable Cable: PVC, unshielded, 5 m | DOL-1204-G05M | 6009866 |

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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.

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