



FLG2-20012021

FLG

SWITCHING AUTOMATION LIGHT GRIDS

SICK
Sensor Intelligence.



Illustration may differ



Ordering information

Type	Part no.
FLG2-20012021	6050064

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

Detailed technical data

Features

Version	Open
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)	120 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)	182 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	≥ 1.12 kg
Switching frequency	≤ 5,000 Hz

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

²⁾ Adjustable.

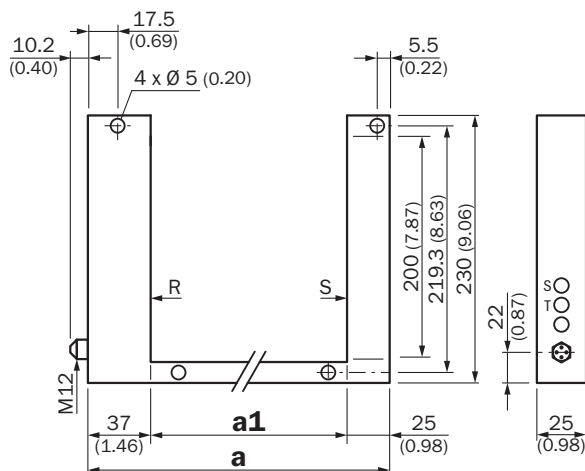
Ambient data

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))

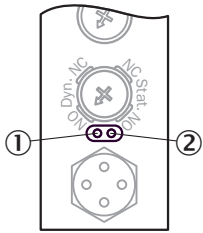
FLGx-200xxx2x



	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

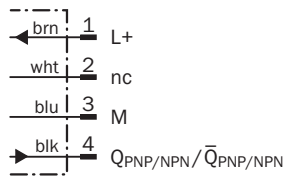
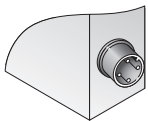
Indication LED



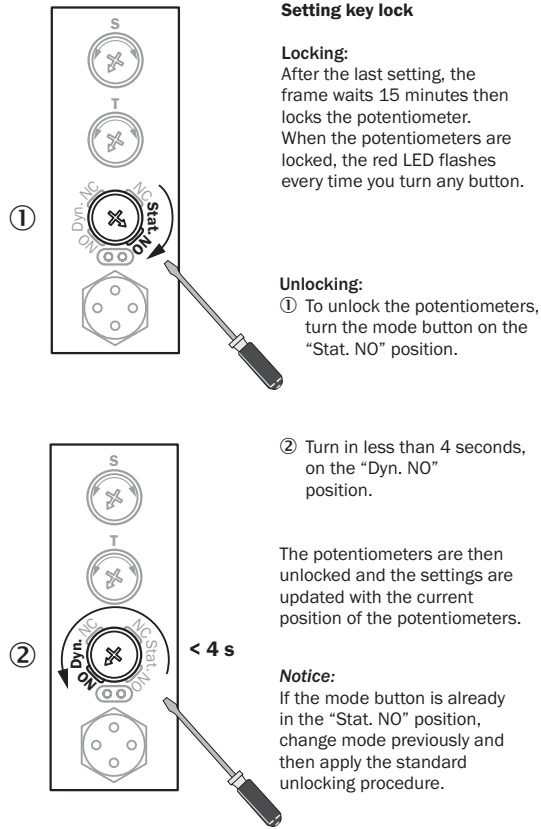
- ① Yellow LED: status output
- ② Red LED: error or button lock active (blinking)

Connection type and diagram

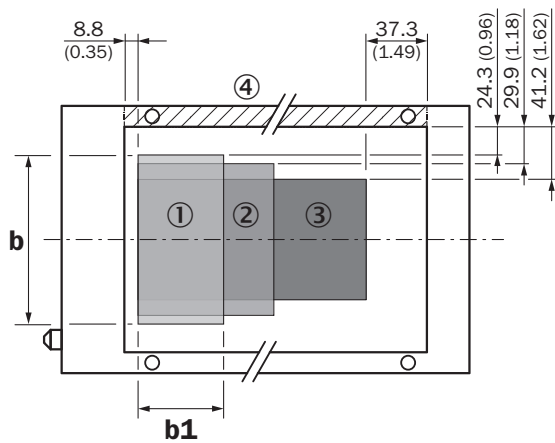
M12, 4-pin male connector



Concept of operation



Diagramm



All dimensions in mm (inch)


④ Side is missing in open version

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)

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.

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.”

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