



DATA SHEET

FLG4-20018021

FLG
Automation light grids

SICK

Sensor Intelligence

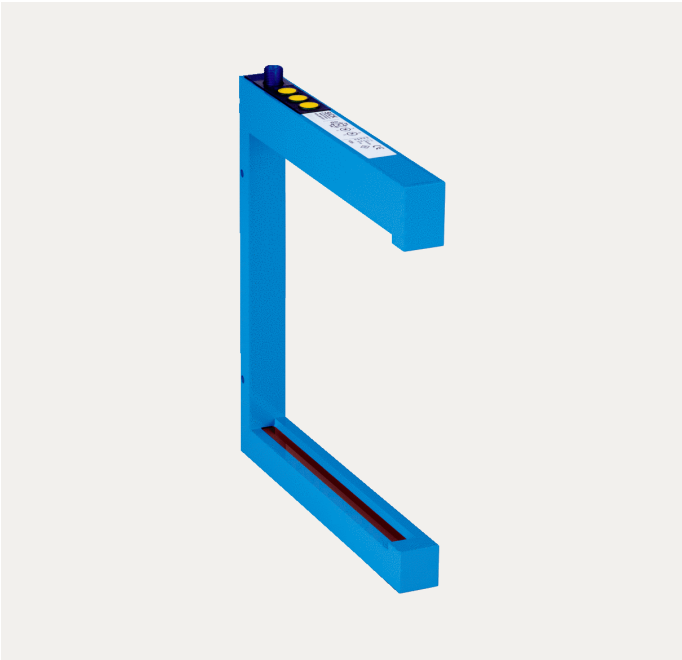


Illustration may differ

AUTOMATION LIGHT GRIDS

FLG4-20018021

ORDERING INFORMATION

Type	part no.
FLG4-20018021	6050068

Further device versions and accessories at www.sick.com/FLG



DETAILED TECHNICAL DATA

FEATURES

Device version	Open
Sensor principle	Sender/receiver
Minimum detectable object (MDO)	2 mm, dynamic: 4 mm 6 mm, static: 6 mm
Beam separation	4 mm
Detection height	180 mm
Output function	Light/dark switching adjustable by means of rotary switch

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
Switching output	PNP ³⁾ NPN
Dimensions (W x H x D)	242 mm x 230 mm x 25 mm
Connection type	Male connector M12, 4-pin
Housing material	Aluminum, painted
Display	LED
Enclosure rating	IP65
Circuit protection	U_v connections, reverse polarity protected

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

²⁾ Adjustable.

³⁾ Q / Q̇.

	Output Q short-circuit protected Interference pulse suppression
Protection class	III
Weight	1 kg
Switching frequency	5,000 Hz

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

²⁾ Adjustable.

³⁾ $Q / \dot{Q}$.

PERFORMANCE

Detection field (W x H)	180 mm x 200 mm
Response time	< 0.1 ms

AMBIENT DATA

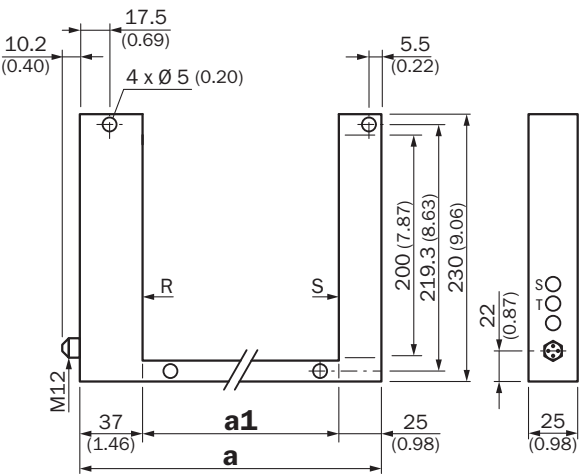
Shock resistance	EN 60068-2-27
Vibration resistance	EN 60068-2-6
EMC	EN 60947-5-2
Ambient light immunity	Sunlight: 10,000 lx
Ambient operating temperature	0 °C ... +60 °C ¹⁾
Ambient temperature, storage	-20 °C ... +80 °C

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

CERTIFICATES

EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓
China RoHS	✓
China Compulsory Product Certification (CCC) ex-empt	✓

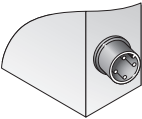
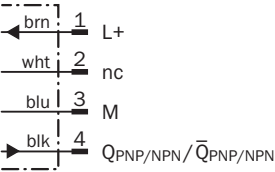
DIMENSIONAL DRAWING FLGX-200XXX2X



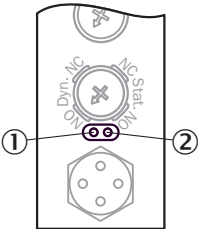
Dimensions in mm (inch)

	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)

CONNECTION TYPE AND DIAGRAM

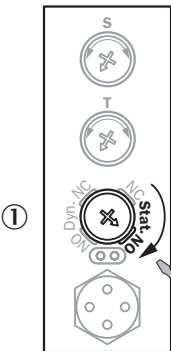


DISPLAY LED



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

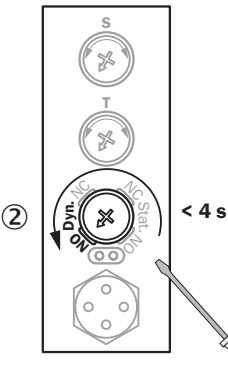
SETTING THE KEY LOCK



Setting key lock

Locking:
After the last setting, the frame waits 15 minutes then locks the potentiometer. When the potentiometers are locked, the red LED flashes every time you turn any button.

Unlocking:
① To unlock the potentiometers, turn the mode button on the "Stat. NO" position.

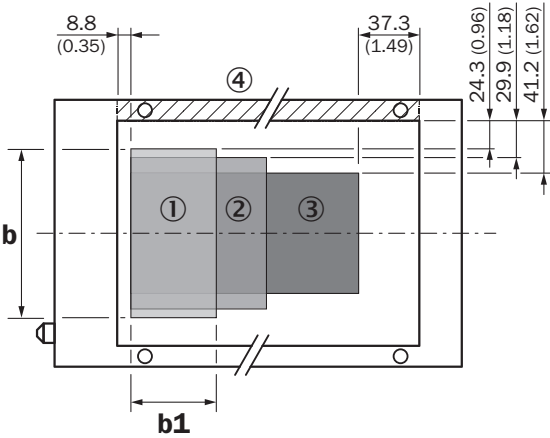


② Turn in less than 4 seconds, on the "Dyn. NO" position.

The potentiometers are then unlocked and the settings are updated with the current position of the potentiometers.

Notice:
If the mode button is already in the "Stat. NO" position, change mode previously and then apply the standard unlocking procedure.

LIMITED DETECTION AREA



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

Further information as well as suitable accessories, example applications and downloads such as CAD dimensional models, operating instructions and software can be found at www.sick.com/6050068

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SICK AT A GLANCE

SICK is a leading global technology company for intelligent sensors and integrated solutions in industrial automation. Our technologies set benchmarks, making your industrial processes more efficient, safer and more sustainable – both in logistics and manufacturing operations.

SICK combines sensor intelligence with industry expertise and certified consulting services. We provide the ideal foundation for scalable as well as tailor-made automation solutions and create added value along the entire value chain. Our close partnerships with our customers are more than just a promise: Together, we optimize productivity, improve quality, protect health and safety, and help build a sustainable future. All with empathy and trust.

Since 1946, we have been developing innovative technologies with passion and a pioneering spirit. With a global network in around 40 countries, SICK has a global presence and is always close by. The company's headquarters are located in Waldkirch near Freiburg, Germany. Our customers benefit from our understanding of both local and global requirements, which enables us to deliver tailor-made solutions

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