



Switching automation light grids FLG

FLG4-20012021



Model Name > [FLG4-20012021](#)
Part No. > [6050067](#)

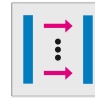


Illustration may differ

At a glance

- Dynamic or static operating mode, switchable
- Simple adjustment
- Adjustable sensitivity
- Adjustable pushbutton lock
- Rugged metal housing
- Adjustable pulse lengthening
- Switchable NO/NC

Your benefits

- Simple installation and alignment due to sender and receiver in one housing
- The adjustable pushbutton lock protects against unwanted changes to parameters and manipulation during operation
- The device's adjustable sensitivity, operating mode and pulse lengthening features enable individual parameter changes to fit the requirements of your application
- Also available as an one side open version for simple integration into your application environment
- Large monitoring area, so only one device is required for monitoring small and large parts
- Using the sensitivity setting, it is possible to hide falling debris and only recognize objects that are relevant to detect



Features

Version:	Open
Technology:	Sender/receiver
Task ¹⁾ :	Switching light grid
Minimum detectable object (MDO):	Dynamic: 4 mm Statiic: 6 mm
Beam separation:	4 mm
Output function:	Light/dark switching adjustable by means of rotary switch

¹⁾ Dynamic or static function adjustable by means of rotary switch

Performance

Response time:	< 0.1 ms
Detection area (W x H):	120 mm x 200 mm

Interfaces

Electrical connection: Connector M12, 4-pin

Mechanics/electronics

Wave length: 880 nm
Supply voltage V_s ¹⁾: DC 18 V ... 30 V
Residual ripple: < 10 %
Output current $I_{max.}$: 100 mA
Initialization time: 0.3 s
Dimensions (W x H x D): 182 mm x 230 mm x 25 mm
Housing material: Aluminum, painted
Indication: LED
Enclosure rating: IP 65
Circuit protection: Output Q short-circuit protected
Interference suppression
VS connections reverse-polarity protected

Weight: 1.12 kg
Switching frequency: $\leq 5,000$ Hz
Off delay: 0 s ... 5 s ²⁾

¹⁾ Limit values, reverse-polarity protected, operation in short-circuit protected network: max. 8 A ²⁾ Adjustable

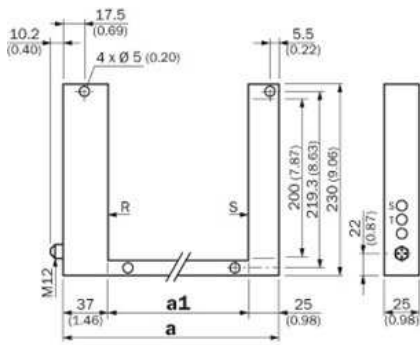
Ambient data

Protection class: III
EMC: EN 60947-5-2
Ambient temperature ¹⁾: Operation: 0 ... +60 °C
Storage: -20 ... +80 °C

Ambient light safety: Sunlight: 10,000 lx
Vibration resistance: (EN 60068-2-6)
Shock load: EN 60068-2-27

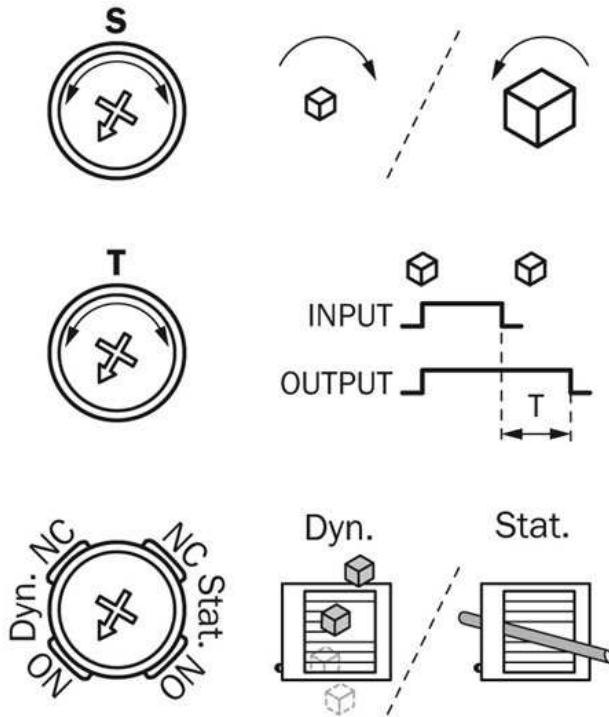
¹⁾ In static mode: constant temperature around teaching point will be assumed

Dimensional drawing

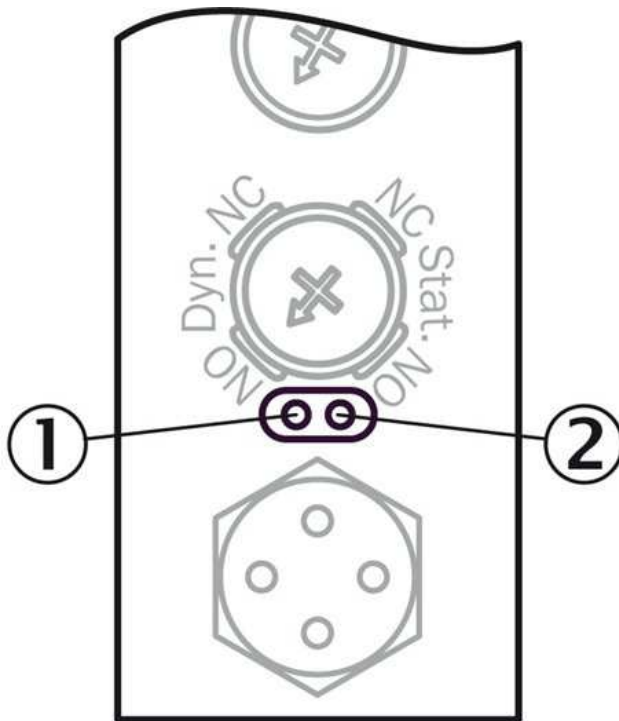


	a	a1
FLGx-200120xx	182 (7.17)	120 (4.72)
FLGx-200180xx	242 (9.53)	180 (7.09)
FLGx-200250xx	312 (12.28)	250 (9.84)

Adjustments

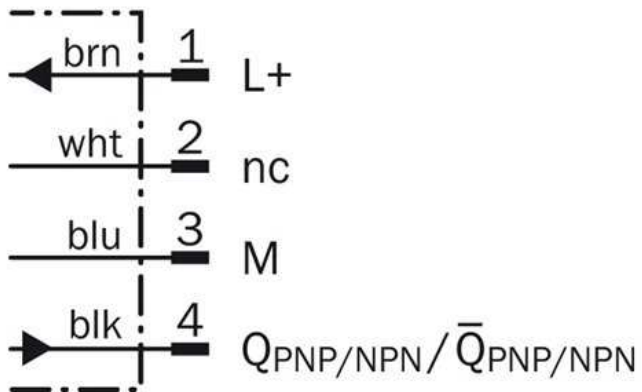
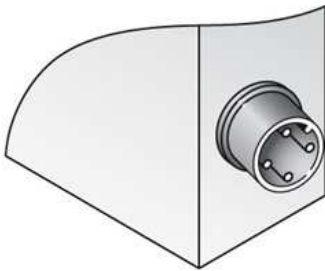


LED display

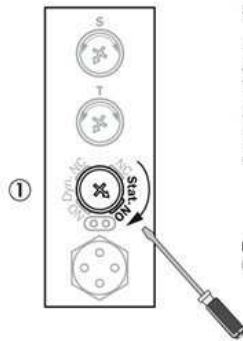


- |1| Yellow LED: Output state
- |2| Red LED: Error or key lock funktion active (blinking)

Connection type and diagram



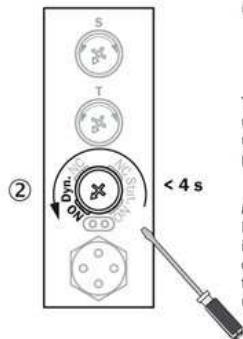
Setting the key lock



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.

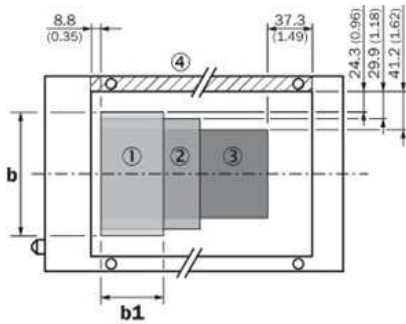


② Turn in less than 4 seconds, on the "Dyn. NO" position.

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)

[4] Side is missing in open version

	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)

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