



Standard automation light grids FLG

FLG2-20018021



Model Name > [FLG2-20018021](#)
Part No. > [6050065](#)

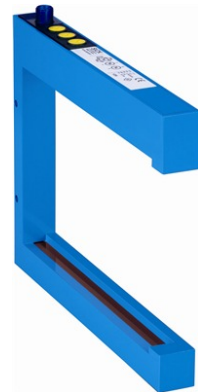


Illustration may differ

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) ²⁾ :	≤dynamic: 2 mm ≤static: 6 mm
Beam separation:	2 mm
Output function:	Light/dark switching adjustable by means of rotary switch

¹⁾ Dynamic or static function adjustable by means of rotary switch ²⁾ 2 mm MDO in limited detection area

Performance

Response time:	< 0.1 ms
Detection area (W x H) ¹⁾ :	180 mm x 200 mm

¹⁾ 2 mm MDO in limited detection area

Interfaces

Connection type: Connector M12, 4-pin

Mechanics/electronics

Wave length: 880 nm
Supply voltage V_s ¹⁾: DC 18 V ... 30 V
Power consumption ²⁾: < 150 mA
Ripple: < 10 %
Output current $I_{max.}$: 100 mA
Initialization time: 0.3 s
Dimensions (W x H x D): 242 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 kg
Switching frequency: $\leq 5,000$ Hz
Off delay: 0 s ... 5 s ³⁾

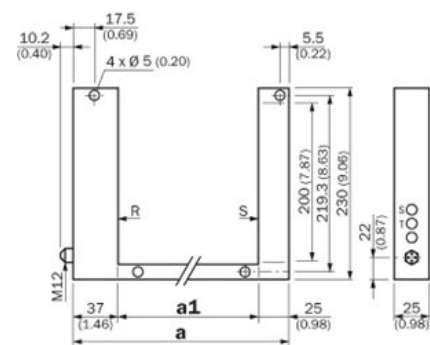
¹⁾ Limit values, reverse-polarity protected, operation in short-circuit protected network: max. 8 A ²⁾ Without load ³⁾ Adjustable

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

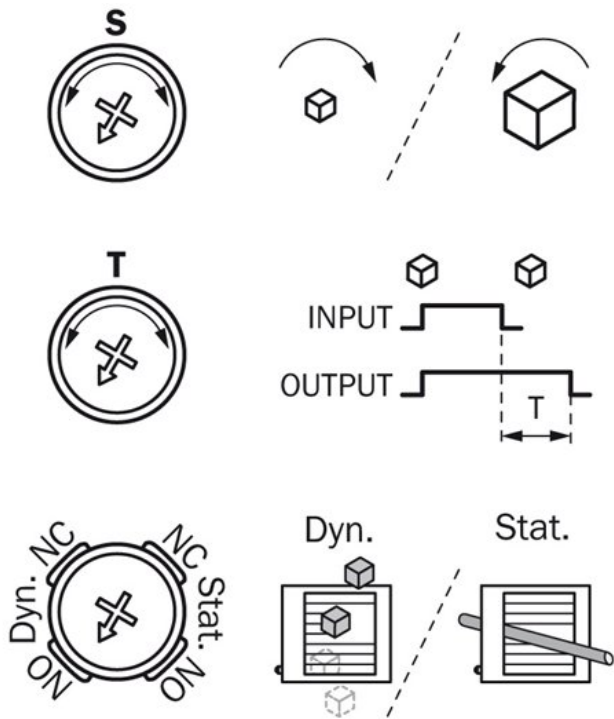
¹⁾ In static mode: constant temperature around teaching point will be assumed

Dimensional drawing

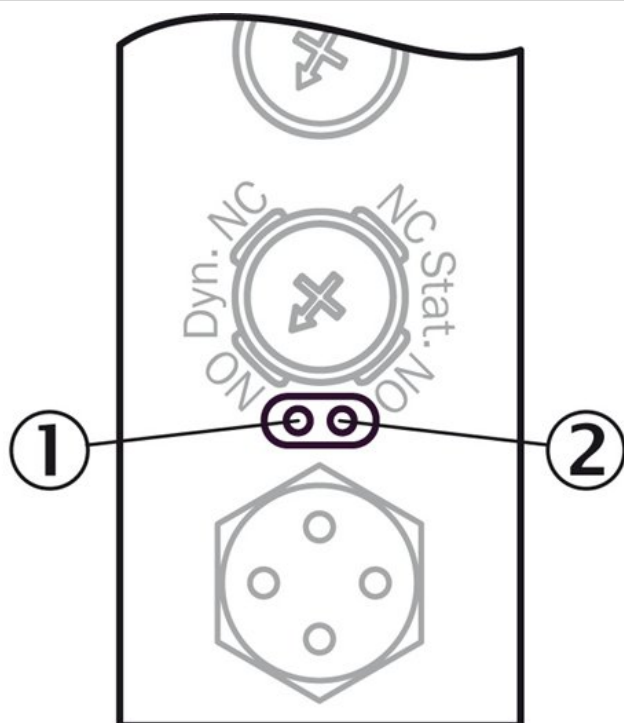


	a	a1
FLGx-200120xx	182 (7.17)	120 (4.72)
FLGx-200180xx	242 (9.53)	180 (7.09)
FLGx-200250xx	312 (12.28)	250 (9.84)

Adjustments



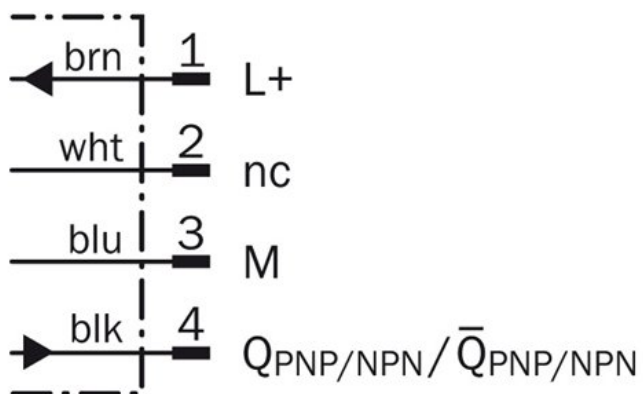
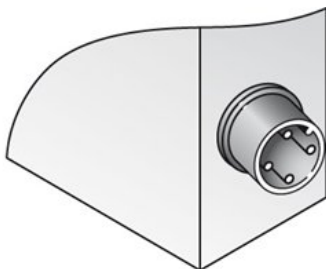
LED display



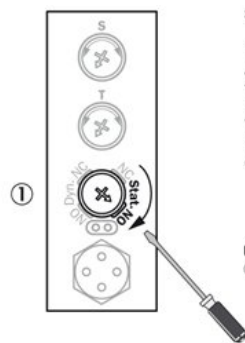
|1| Yellow LED: Output state

|2| Red LED: Error or key lock funktion active (blinking)

Connection type and diagram



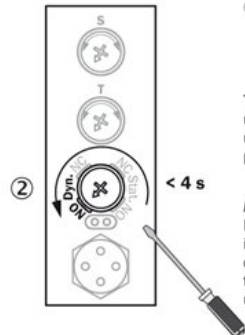
Setting the key lock



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.

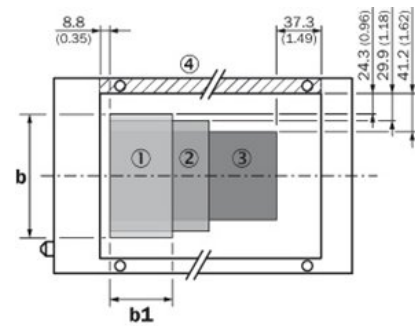


② Turn in less than 4 seconds, on the "Dyn. NO" position.

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



8.8 (0.35) 37.3 (1.49) 24.3 (0.96) 29.9 (1.18) 41.2 (1.62)

④

① ② ③

b

b1

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)

|4| Side is missing in open version

All dimensions in mm (inch)

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