



## Standard automation light grids ELG, ELG Long Range

ELG6-2340P521



**Model Name** > [ELG6-2340P521](#)  
**Part No.** > [1025596](#)



#### At a glance

- Up to 128 beams
- Different beam separations 30 mm and 60 mm
- High functional reserve (gain) for ranges up to 12 m
- Potentiometer for sensitivity setting
- Ambient light up to 150,000 lux
- Tough, aluminum housing
- PNP/NPN/relay output and a test input
- Optical synchronization

#### Your benefits

- Insensitive to ambient light when exposed to direct sunlight, strobe lights, and highly reflective objects, eliminating false trips
- High functional reserve (excess gain) ensures operation even if it gets dirty, dusty, or misaligned, reducing maintenance costs
- Efficient and effective way to combine multiple sensors in one housing with one connector
- Simple commissioning thanks to a larger optical aperture angle and manual fine adjustment option
- Optical synchronization enables quick installation and cost-effective connection
- The sensitivity adjustment can be used to detect or ignore translucent materials to reduce production problems



#### Features

|                                  |                                   |
|----------------------------------|-----------------------------------|
| Technology:                      | Sender/receiver                   |
| Task:                            | Switching light grid              |
| Minimum detectable object (MDO): | ≤Parallel beam: ≥ 35 mm ... 65 mm |
| Beam separation:                 | 60 mm                             |
| Number of beams:                 | 40                                |
| Detection height:                | 2,340 mm                          |
| Evaluation beams:                | Parallel beam                     |

#### Performance

|                |       |
|----------------|-------|
| Maximum range: | 17 m  |
| Minimum range: | ≥0 mm |
| Working range: | 12 m  |

Response time <sup>1)</sup>:

Parallel beam: ≥100 ms

<sup>1)</sup> With resistive load

## Interfaces

|                  |                      |
|------------------|----------------------|
| Output type:     | 0 x PNP (Q and /Q)   |
| Connection type: | Connector M12, 4-pin |
| Test input:      | PNP                  |

## Mechanics/electronics

|                                            |                                                                                                           |
|--------------------------------------------|-----------------------------------------------------------------------------------------------------------|
| Wave length:                               | 880 nm                                                                                                    |
| Supply voltage Vs <sup>1)</sup> :          | DC 15 V ... 30 V                                                                                          |
| Power consumption <sup>2)</sup> :          | < 100 mA                                                                                                  |
| Power consumption sender <sup>3)</sup> :   | < 100 mA                                                                                                  |
| Power consumption receiver <sup>4)</sup> : | < 100 mA                                                                                                  |
| Ripple:                                    | < 5 Vpp                                                                                                   |
| Output current I <sub>max</sub> :          | 100 mA                                                                                                    |
| Output load capacitive:                    | 100 nF                                                                                                    |
| Output load inductive:                     | 1 H                                                                                                       |
| Initialization time:                       | 1 s                                                                                                       |
| Dimensions (W x H x D):                    | 34 mm x 2,416 mm x 29 mm                                                                                  |
| Housing material:                          | Aluminum                                                                                                  |
| Indication:                                | LED                                                                                                       |
| Synchronization:                           | Optical                                                                                                   |
| Enclosure rating:                          | IP 65                                                                                                     |
| Circuit protection:                        | Output Q short-circuit protected<br>Interference suppression<br>VS connections reverse-polarity protected |
| Weight:                                    | 5,900 g                                                                                                   |
| Front screen:                              | PMMA                                                                                                      |
| Pulse rate:                                | 250 kHz                                                                                                   |
| Output mode <sup>5)</sup> :                | Q dark switching                                                                                          |

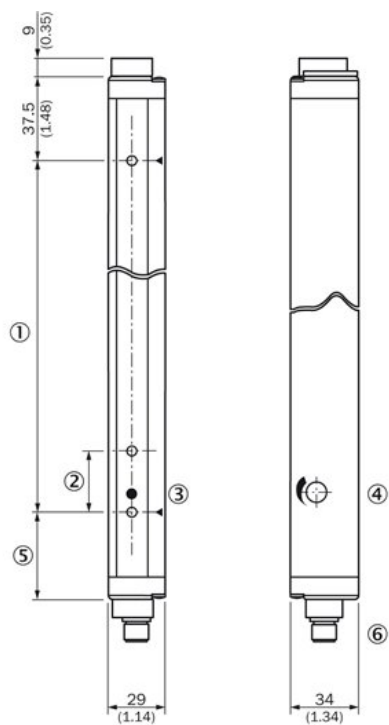
1) 2) 3) 4) Typical value <sup>5)</sup> Q = active in case one beam is interrupted, /Q = active in case all beam are free

## Ambient data

|                                      |                                                    |
|--------------------------------------|----------------------------------------------------|
| Protection class:                    | III                                                |
| EMC:                                 | EN 60947-5-2                                       |
| Ambient temperature:                 | Operation: -25 ... 55 °C<br>Storage: -40 ... 70 °C |
| Ambient light safety <sup>1)</sup> : | Indirect: ≤ 150,000 lx                             |
| Vibration resistance:                | 5 g, 10 Hz ... 55 Hz (IEC 68-2-6)                  |
| Shock load:                          | 10 g/DIN EN 60068-2-29/16 ms                       |

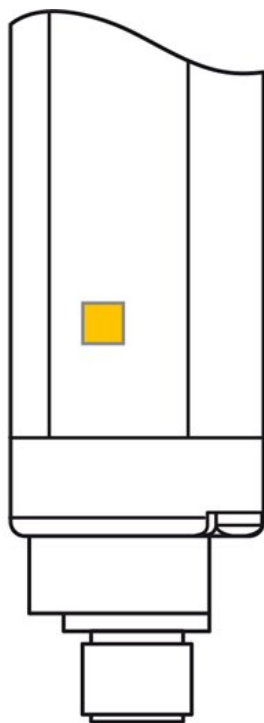
<sup>1)</sup> Sunlight

## Dimensional drawing



- |1| Detection height
- |2| Beam spacing ELG3: 30 mm/ELG6: 60 mm
- |3| Status indicator (ELGE)/Power on (ELGS)
- |4| Sensitivity adjustment
- |5| Distance to first beam ELG3: 38,5 mm/ELG6: 68,5 mm
- |6| Connector M12, 4-pin

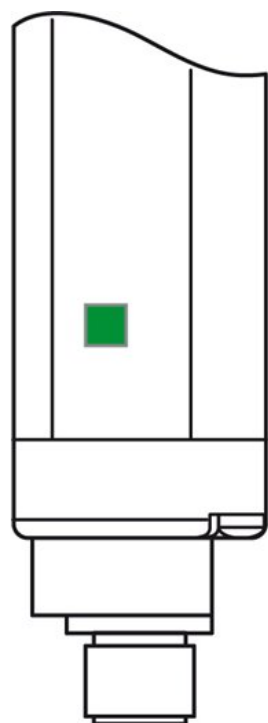
## LED display receiver



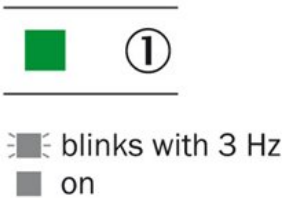
- |1| No object in the light path
- |2| Pollution indication



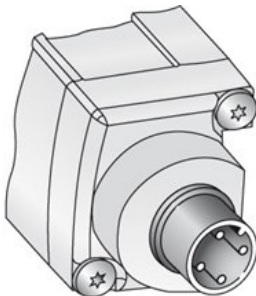
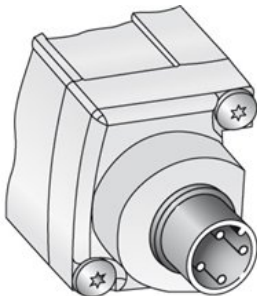
LED display sender



|1| Supply voltage

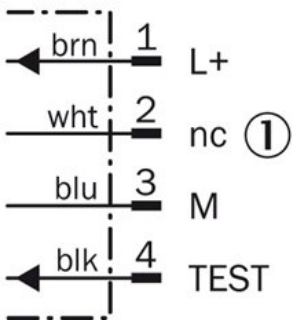


Connection type and diagram

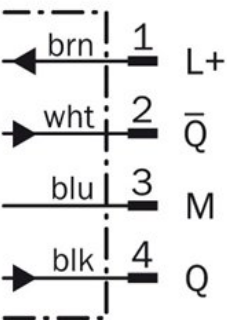


|1| not connected

Sender



Receiver



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