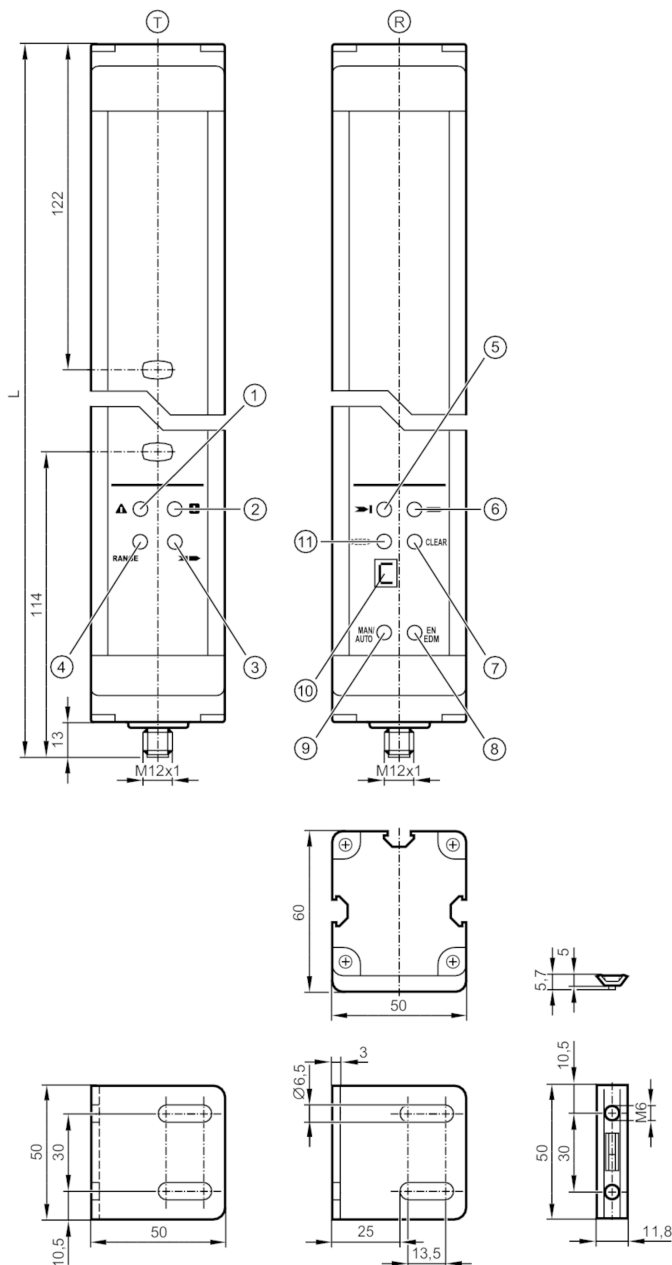




## Safety light grids

OYA0510-02-4-60-P-1

For 8-wire cordsets the core colors are not standardized.  
Please note the wiring of the sensor and the cordsets (see data sheet).



- T transmitter
- R receiver
- 1 LED red
- 2 LED green
- 3 LED yellow
- 4 LED orange
- 5 LED red
- 6 LED green
- 7 LED yellow
- 8 LED yellow
- 9 LED yellow
- 10 display
- 11 LED orange





## Safety light grids

OYA0510-02-4-60-P-1

| Product characteristics                      |                                                |             |
|----------------------------------------------|------------------------------------------------|-------------|
| Type of light                                | Infrared light                                 |             |
| Electrical design                            | PNP                                            |             |
| Protection                                   | IP 65                                          |             |
| Application                                  |                                                |             |
| Protective function                          | Access prevention body protection              |             |
| Electrical data                              |                                                |             |
| Operating voltage tolerance                  | [%]                                            | 20          |
| Operating voltage                            | [V]                                            | 24 DC       |
| Protection class                             | III                                            |             |
| Reverse polarity protection                  | yes                                            |             |
| Power-on delay time                          | [s]                                            | < 10        |
| Type of light                                | Infrared light                                 |             |
| Wave length                                  | [nm]                                           | 950         |
| Receiver                                     |                                                |             |
| Current consumption                          | [mA]                                           | 250         |
| Transmitter                                  |                                                |             |
| Current consumption                          | [mA]                                           | 125         |
| Outputs                                      |                                                |             |
| Electrical design                            | PNP                                            |             |
| Number of OSSD outputs                       | 2                                              |             |
| Max. current load per OSSD output            | [mA]                                           | 500; (24 V) |
| Short-circuit protection                     | yes                                            |             |
| Monitoring range                             |                                                |             |
| Protected area height                        | [mm]                                           | 510         |
| Number of beams                              | 2                                              |             |
| Protection area width (low light intensity)  | [m]                                            | 8...30      |
| Protection area width (high light intensity) | [m]                                            | 18...60     |
| Reaction times                               |                                                |             |
| Response time                                | [ms]                                           | 7           |
| Operating conditions                         |                                                |             |
| Applications                                 | Class C to EN 60654-1 weatherproof application |             |
| Ambient temperature                          | [°C]                                           | -10...55    |
| Max. relative air humidity                   | [%]                                            | 95          |
| Protection                                   | IP 65                                          |             |
| Tests / approvals                            |                                                |             |
| EMC                                          | IEC 61496-1                                    |             |
| Shock resistance                             | IEC 61496-1                                    |             |
| Vibration resistance                         | IEC 61496-1                                    |             |
| Safety classification                        |                                                |             |
| ESPE type (IEC 61496-1)                      | 4                                              |             |



## Safety light grids

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|                                |                                    |         |
|--------------------------------|------------------------------------|---------|
| Complies with the requirements | ISO 13849-1: 2015 Category 4, PL e |         |
|                                | IEC 61508 SIL 3                    |         |
|                                | IEC 62061 SIL 3                    |         |
| Mission time TM                | [h]                                | 175200  |
| PFH                            | [1/h]                              | 7,5E-09 |

## Mechanical data

|            |                                   |               |
|------------|-----------------------------------|---------------|
| Weight     | [g]                               | 5060          |
| Dimensions | [mm]                              | 736 x 50 x 60 |
| Material   | housing: aluminum; front lens: PC |               |
| Length L   | [mm]                              | 736           |

## Displays / operating elements

|         |             |            |
|---------|-------------|------------|
| Display | transmitter | 4 x LED    |
|         | receiver    | 6 x LED    |
|         | receiver    | LC display |

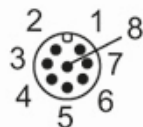
## Accessories

|                |                   |
|----------------|-------------------|
| Items supplied | Assembly angle: 4 |
|                | Slot nuts: 4      |

## Remarks

|               |        |
|---------------|--------|
| Pack quantity | 1 pcs. |
|---------------|--------|

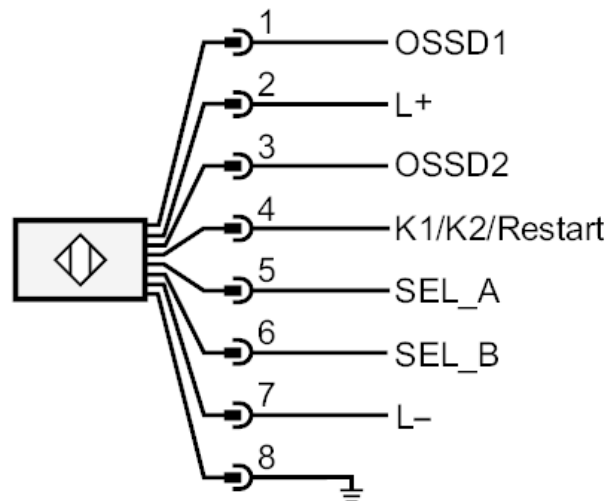
## Electrical connection - receiver

Connector: 1 x M12; coding: A; Maximum cable length: 100 m; for wire cross-section 1 mm<sup>2</sup>

## Safety light grids

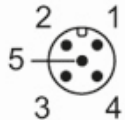
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### Connection



### Electrical connection - transmitter

Connector: 1 x M12; coding: A



### Connection

