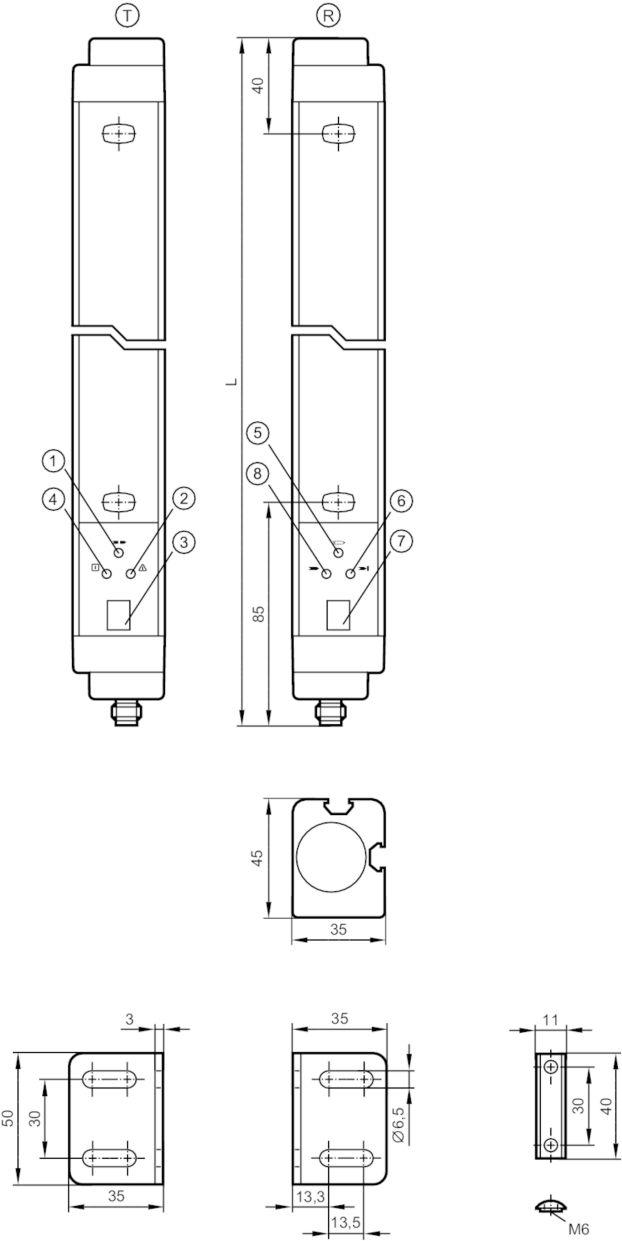




Safety light curtain

OYA1210-20-4-18-P-1-B

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 yellow
- 2 LED red
- 3 7-segment LED display
- 4 LED green
- 5 LED yellow
- 6 LED red
- 7 7-segment LCD display
- 8 LED green



Product characteristics

Type of light

Infrared light



## Safety light curtain

OYA1210-20-4-18-P-1-B

|                                                  |                                                |
|--------------------------------------------------|------------------------------------------------|
| Electrical design                                | PNP                                            |
| Protection                                       | IP 65                                          |
| <b>Application</b>                               |                                                |
| Protective function                              | Access prevention hand protection              |
| <b>Electrical data</b>                           |                                                |
| Operating voltage tolerance [%]                  | 20                                             |
| Operating voltage [V]                            | 24 DC                                          |
| Protection class                                 | III                                            |
| Reverse polarity protection                      | yes                                            |
| Power-on delay time [s]                          | < 18                                           |
| Type of light                                    | Infrared light                                 |
| Wave length [nm]                                 | 950                                            |
| <b>Receiver</b>                                  |                                                |
| Current consumption [mA]                         | 125                                            |
| <b>Transmitter</b>                               |                                                |
| Current consumption [mA]                         | 83                                             |
| <b>Outputs</b>                                   |                                                |
| Electrical design                                | PNP                                            |
| Number of OSSD outputs                           | 2                                              |
| Max. current load per OSSD output [mA]           | 500; (24 V)                                    |
| Short-circuit protection                         | yes                                            |
| <b>Monitoring range</b>                          |                                                |
| Protected area height [mm]                       | 1210                                           |
| Resolution (detection capacity d) [mm]           | 20                                             |
| Protection area width (low light intensity) [m]  | 0...6                                          |
| Protection area width (high light intensity) [m] | 3...18                                         |
| Floating blanking                                | yes                                            |
| <b>Reaction times</b>                            |                                                |
| Response time [ms]                               | 19                                             |
| <b>Operating conditions</b>                      |                                                |
| Applications                                     | Class C to EN 60654-1 weatherproof application |
| Ambient temperature [°C]                         | 0...55                                         |
| Max. relative air humidity [%]                   | 95                                             |
| Protection                                       | IP 65                                          |
| <b>Tests / approvals</b>                         |                                                |
| EMC                                              | IEC 61496-1                                    |
| Shock resistance                                 | IEC 61496-1                                    |
| Vibration resistance                             | IEC 61496-1                                    |
| <b>Safety classification</b>                     |                                                |
| ESPE type (IEC 61496-1)                          | 4                                              |



## Safety light curtain

OYA1210-20-4-18-P-1-B

|                                |                                    |         |
|--------------------------------|------------------------------------|---------|
| 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]                              | 2,1E-08 |

## Mechanical data

|            |                                   |                |
|------------|-----------------------------------|----------------|
| Weight     | [g]                               | 6345           |
| Dimensions | [mm]                              | 1311 x 35 x 45 |
| Material   | housing: aluminum; front lens: PC |                |
| Length L   | [mm]                              | 1311           |

## Displays / operating elements

|         |             |                       |
|---------|-------------|-----------------------|
| Display | transmitter | 3 x LED               |
|         | transmitter | 7-segment LCD display |
|         | receiver    | 3 x LED               |
|         | receiver    | 7-segment LCD display |

## Accessories

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

## Remarks

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

## Electrical connection - receiver

Connector: 1 x M12; coding: A; Maximum cable length: 100 m; for wire cross-section 0.34 mm²





## Safety light curtain

OYA1210-20-4-18-P-1-B

### Connection



### Electrical connection - transmitter

Connector: 1 x M12; coding: A



### Connection

