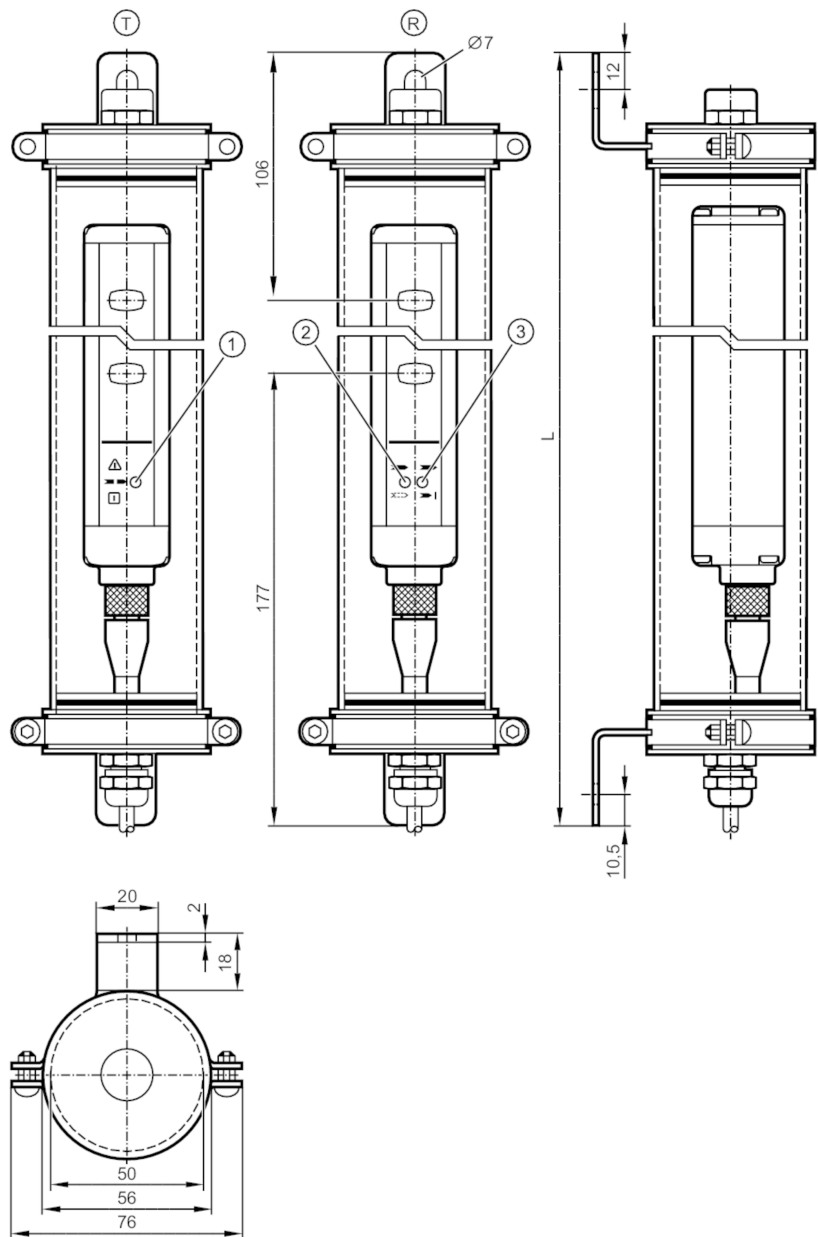


# OY422S

## Safety light grid

OYA0810-03-4-15-P-1-A



- T transmitter  
R receiver  
1 LED three-colour red / green / orange  
2 LED 2-colour yellow/blue  
3 LED 2-colour red/green



### Product characteristics

|                   |                                                      |
|-------------------|------------------------------------------------------|
| Type of light     | infrared light                                       |
| Electrical design | PNP                                                  |
| Protection        | IP 65; IP 67; IP 69K; (with protective tube: IP 69K) |

### Application

|                     |                                   |
|---------------------|-----------------------------------|
| Protective function | access prevention body protection |
|---------------------|-----------------------------------|



## Safety light grid

OYA0810-03-4-15-P-1-A

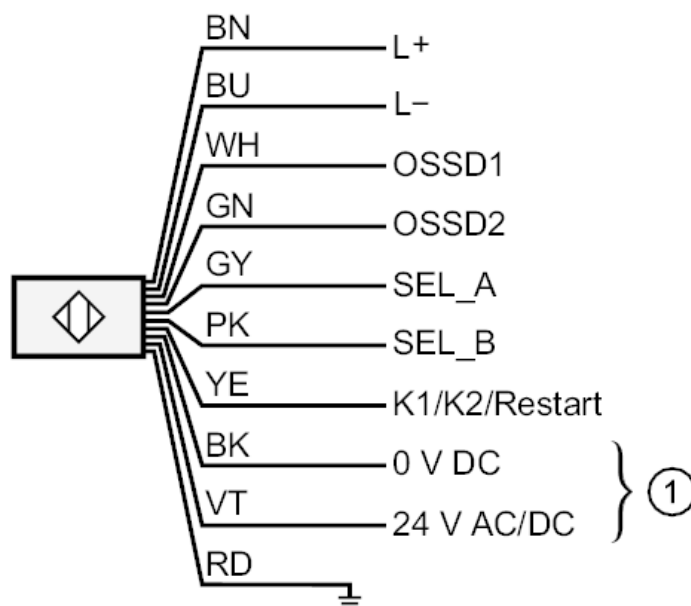
| Electrical data                              |                                    |                                                      |
|----------------------------------------------|------------------------------------|------------------------------------------------------|
| Operating voltage tolerance                  | [%]                                | 20                                                   |
| Operating voltage                            | [V]                                | 24 DC                                                |
| Protection class                             |                                    | III                                                  |
| Reverse polarity protection                  |                                    | yes                                                  |
| Power-on delay time                          | [s]                                | < 2                                                  |
| Type of light                                |                                    | infrared light                                       |
| Wave length                                  | [nm]                               | 950                                                  |
| Receiver                                     |                                    |                                                      |
| Current consumption                          | [mA]                               | 83                                                   |
| Current consumption heating                  | [mA]                               | 417                                                  |
| Transmitter                                  |                                    |                                                      |
| Current consumption                          | [mA]                               | 42                                                   |
| Current consumption heating                  | [mA]                               | 417                                                  |
| Outputs                                      |                                    |                                                      |
| Electrical design                            |                                    | PNP                                                  |
| Number of OSSD outputs                       |                                    | 2                                                    |
| Max. current load per OSSD output            | [mA]                               | 400; (24 V)                                          |
| Short-circuit protection                     |                                    | yes                                                  |
| Detection zone                               |                                    |                                                      |
| Protected area height                        | [mm]                               | 810                                                  |
| Number of beams                              |                                    | 3                                                    |
| Protection area width (low light intensity)  | [m]                                | 0...7                                                |
| Protection area width (high light intensity) | [m]                                | 3...15                                               |
| Response times                               |                                    |                                                      |
| Response time                                | [ms]                               | 2.5                                                  |
| Operating conditions                         |                                    |                                                      |
| Ambient temperature                          | [°C]                               | -20...55                                             |
| Max. relative air humidity                   | [%]                                | 95                                                   |
| Protection                                   |                                    | IP 65; IP 67; IP 69K; (with protective tube: IP 69K) |
| Tests / approvals                            |                                    |                                                      |
| EMC                                          | IEC 61496-1                        |                                                      |
| Shock resistance                             | IEC 61496-1                        |                                                      |
| Vibration resistance                         | IEC 61496-1                        |                                                      |
| Safety classification                        |                                    |                                                      |
| ESPE type (IEC 61496-1)                      |                                    | 4                                                    |
| 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]                              | 1,0E-08                                              |



## Safety light grid

OYA0810-03-4-15-P-1-A

| Mechanical data                                                          |             |                                                                                                            |
|--------------------------------------------------------------------------|-------------|------------------------------------------------------------------------------------------------------------|
| Weight                                                                   | [g]         | 6450                                                                                                       |
| Dimensions                                                               | [mm]        | 1077 x 76 x 74                                                                                             |
| Materials                                                                |             | thermowell: PMMA transparent; Protective cap: POM; clamp: stainless steel (316L/1.4404); Sealing: silicone |
| Length L                                                                 | [mm]        | 1077                                                                                                       |
| Displays / operating elements                                            |             |                                                                                                            |
| Display                                                                  | transmitter | 1 x LED                                                                                                    |
|                                                                          | receiver    | 2 x LED                                                                                                    |
| Remarks                                                                  |             |                                                                                                            |
| Pack quantity                                                            |             | 1 pcs.                                                                                                     |
| Electrical connection - receiver                                         |             |                                                                                                            |
| Cable: 15 m, PVC; Maximum cable length: 100 m; 10 x 0.34 mm <sup>2</sup> |             |                                                                                                            |
| Connection                                                               |             |                                                                                                            |



|      |                |
|------|----------------|
| 1:   | heating        |
|      | Core colours : |
| BK = | black          |
| BN = | brown          |
| BU = | blue           |
| GN = | green          |
| GY = | grey           |
| PK = | pink           |
| RD = | red            |
| VT = | lilac          |
| WH = | white          |
| YE = | yellow         |

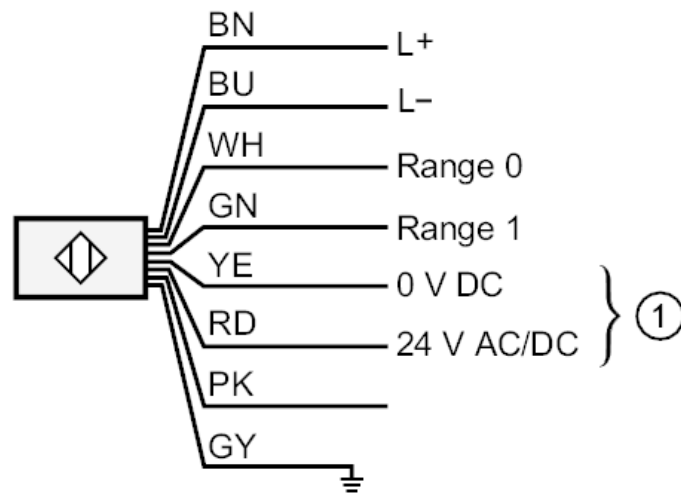
## Safety light grid

OYA0810-03-4-15-P-1-A

### Electrical connection - transmitter

Cable: 15 m, PVC; 8 x 0.34 mm<sup>2</sup>

### Connection



1: heating  
 PK: not used  
 Core colours :  
 BN = brown  
 BU = blue  
 GN = green  
 GY = grey  
 PK = pink  
 RD = red  
 WH = white  
 YE = yellow