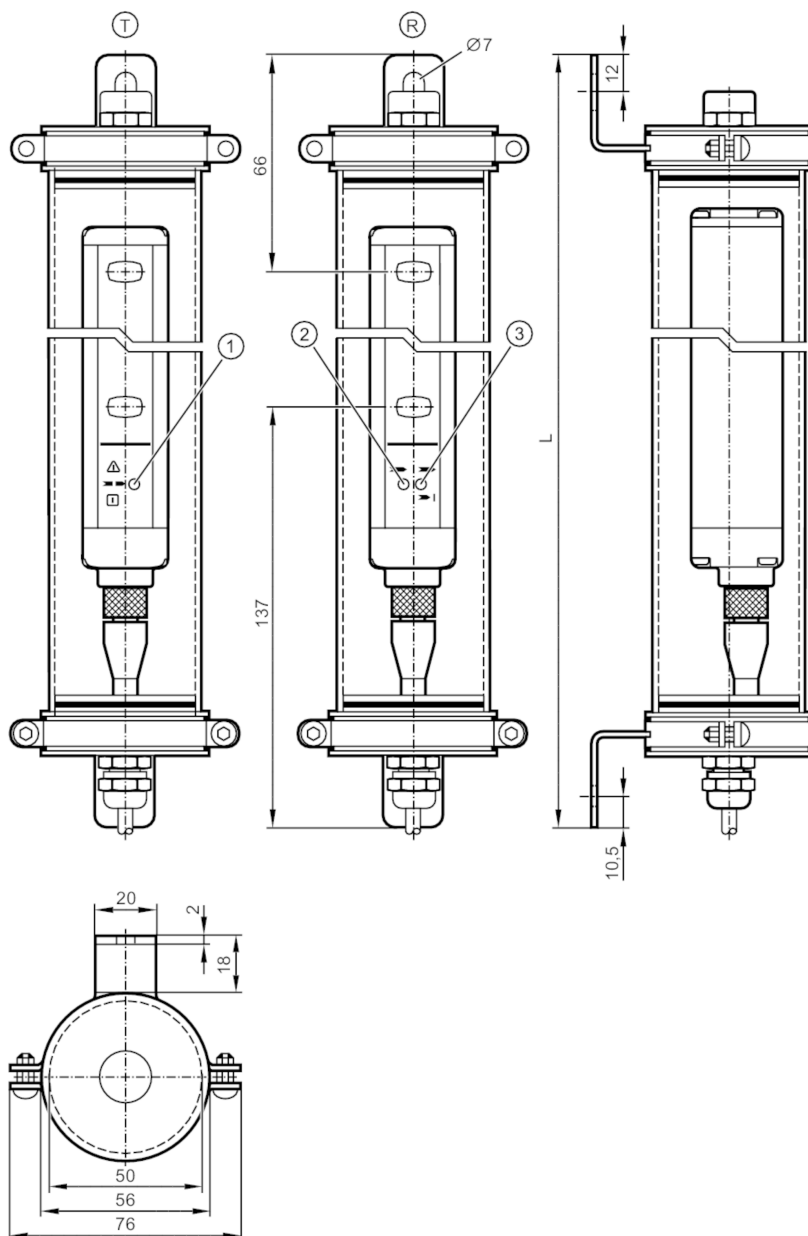


OY431S



Safety light curtain

OYA0160-30-2-09-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 |
| Dimensions [mm] | Ø 56 |

Application

| | |
|---------------------|-----------------------------------|
| Protective function | access prevention hand protection |
|---------------------|-----------------------------------|



Safety light curtain

OYA0160-30-2-09-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] | 83 |
| Transmitter | | |
| Current consumption | [mA] | 42 |
| Current consumption heating | [mA] | 83 |
| 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] | 160 |
| Resolution (detection capacity d) | [mm] | 30 |
| Protection area width (low light intensity) | [m] | 0...3 |
| Protection area width (high light intensity) | [m] | 2...10 |
| Response times | | |
| Response time | [ms] | 4.5 |
| 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) | | 2 |
| ISO 13849-1 | | category 2, PL c |
| IEC 62061 | | SIL cl 1 |
| Mission time TM | [h] | 175200 |
| Safety-related reliability PFHD | [1/h] | 2.0E-08 |

OY431S



Safety light curtain

OYA0160-30-2-09-P-1-A

| Mechanical data | | |
|-------------------------------|---|---------|
| Weight | [g] | 2940 |
| Dimensions | [mm] | Ø 56 |
| Materials | thermowell: PMMA transparent; Protective cap: POM; clamp: stainless steel (1.4404 / 316L); Sealing: silicone | |
| Length L | [mm] | 337 |
| Displays / operating elements | | |
| Display | transmitter | 1 x LED |
| | receiver | 2 x LED |
| Remarks | | |
| Pack quantity | 1 pcs. | |

OY431S



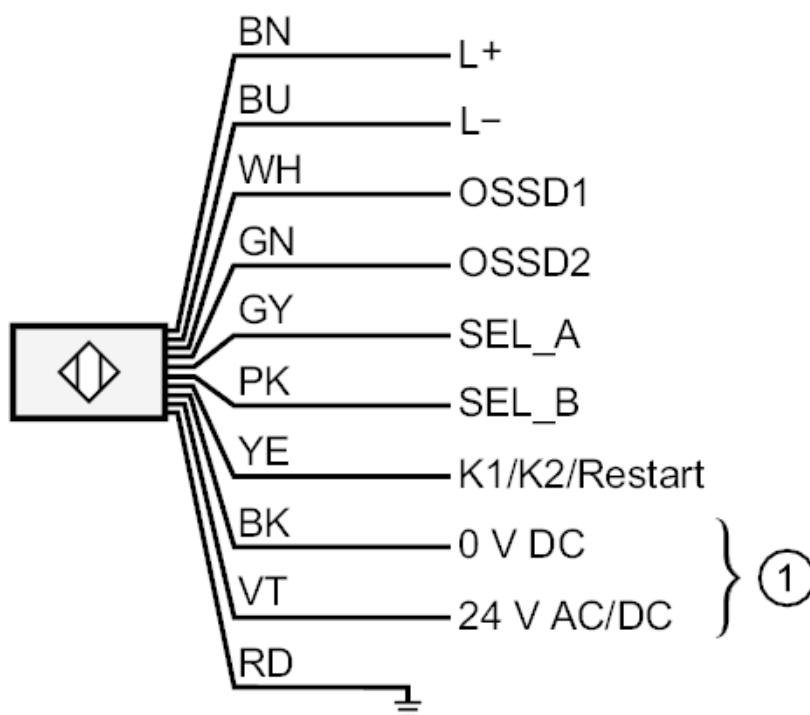
Safety light curtain

OYA0160-30-2-09-P-1-A

Electrical connection - receiver

Cable: 15 m, PVC; Maximum cable length: 100 m; 10 x 0.34 mm²

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 |

OY431S



Safety light curtain

OYA0160-30-2-09-P-1-A

Electrical connection - transmitter

Cable: 15 m, PVC; 8 x 0.34 mm²

Connection



1: heating

PK: not used

Core colours :

BN = brown

BU = blue

GN = green

GY = grey

PK = pink

RD = red

WH = white

YE = yellow