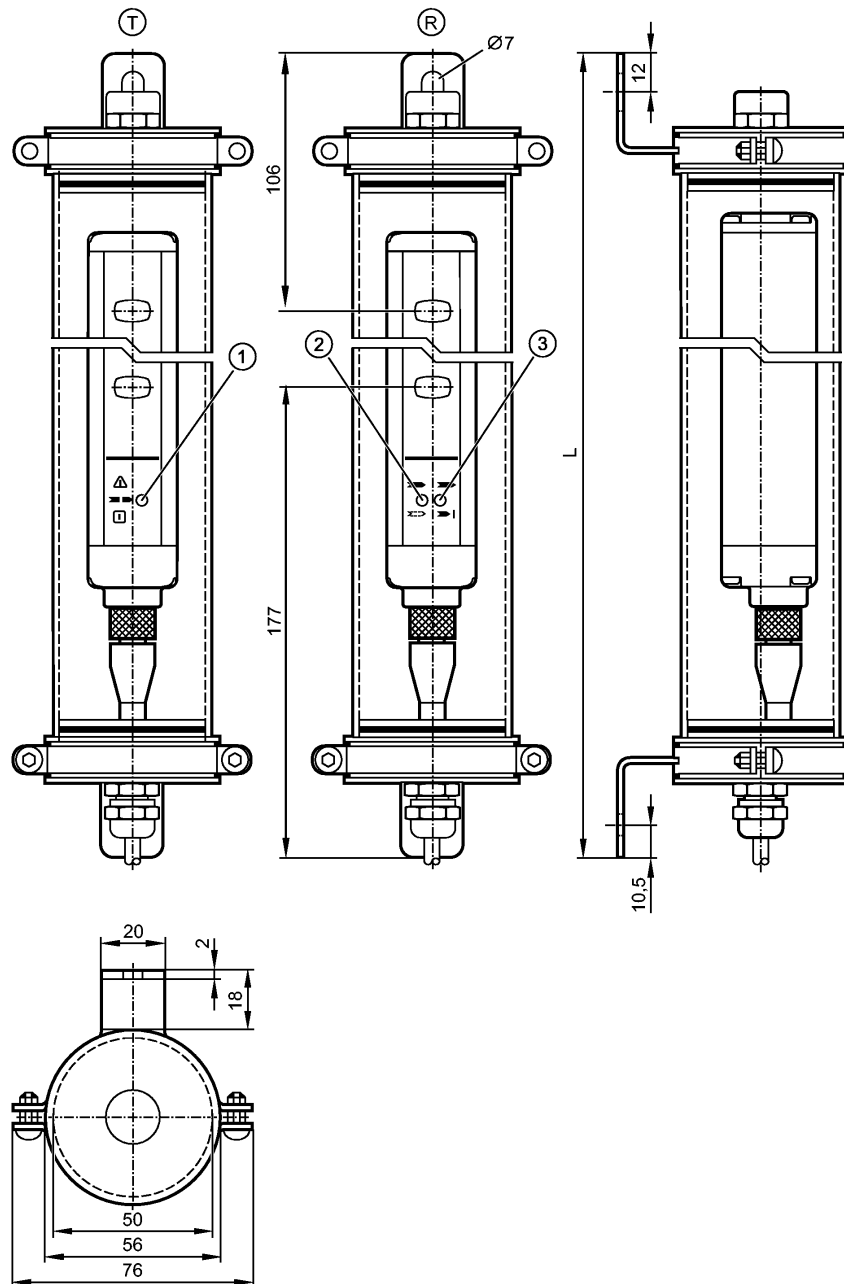


OY421S

OYA0510-02-4-15-P-1-A

Photoelectric sensors



T: Transmitter

R: Receiver

1: LED 3 colours (red/green/orange)

2: LED 2 colours (yellow/blue)

3: LED 2 colours (red/green)



Product characteristics

Safety light grid

Length L: 770 mm

Cable

with IP69K protective tube

Complies with the requirements:

type 4 (IEC 61496-1)

SIL 3 (IEC 61508)

OY421S

OYA0510-02-4-15-P-1-A

Photoelectric sensors

SILCl 3 (IEC 62061)

PL e (EN ISO 13849-1)

Electrical data

Electrical design	DC PNP
Operating voltage [V]	24 DC (19.2...28.8)
Current consumption	
- Transmitter [mA]	42
- Heating [mA]	333
- Receiver [mA]	83
- Heating [mA]	333
Type of light	Infrared light 950 nm
Protection class	III
Reverse polarity protection	yes
Power-on delay time [s]	< 2

Outputs

Outputs (OSSDs)	2 x PNP
Max. current load per output [mA]	400 (24 V)
Short-circuit protection	yes

Range

Protected area height [mm]	510
Number of beams	2
Protected area width (range) [m]	0...7 / 3...15

Reaction times

Response time [ms]	2.5
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Environment

Ambient temperature [°C]	-20...55
Max. relative air humidity [%]	95
Protection	IP 65 / IP 67 / IP 69K

Tests / approvals

EMC	IEC 61496-1
Shock resistance	IEC 61496-1
Vibration resistance	IEC 61496-1

Safety classification

Mission time TM [h]	175200
Safety-related reliability PFHd [1/h]	9.2E-09
MTTFd [Years]	100
DC/CCF/Cat.	95.8 % / 80 % / 4

Mechanical data

Length L [mm]	770
Housing materials	protective tube: PMMA transparent; Protective cap: POM; bracket: stainless steel (316L); sealing: silicone
Weight [kg]	4.7

Displays / operating elements

Display	LED yellow LED green LED Red
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OY421S

OYA0510-02-4-15-P-1-A

Photoelectric sensors

LED blue
LED orange

Electrical connection

Transmitter

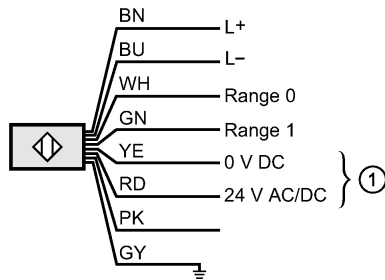
Connection

PVC cable / 15 m; 8 x 0.34 mm²

Wiring Transmitter

Core colours

BN brown
BU blue
GN green
GY grey
PK pink
RD red
WH white
YE yellow



1: Heating
PK: not used

Receiver

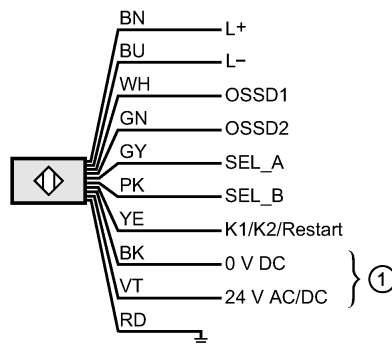
Connection

PVC cable / 15 m; 10 x 0.34 mm²

Wiring Receiver

Core colours

BK black
BN brown
BU blue
GN green
GY grey
PK pink
RD red
VT lilac
WH white
YE yellow



1: Heating

Max. connection cable length [m]

100 *)

Remarks

Remarks

*) for wire cross-section 0.34 mm²

Pack quantity

[piece]

1