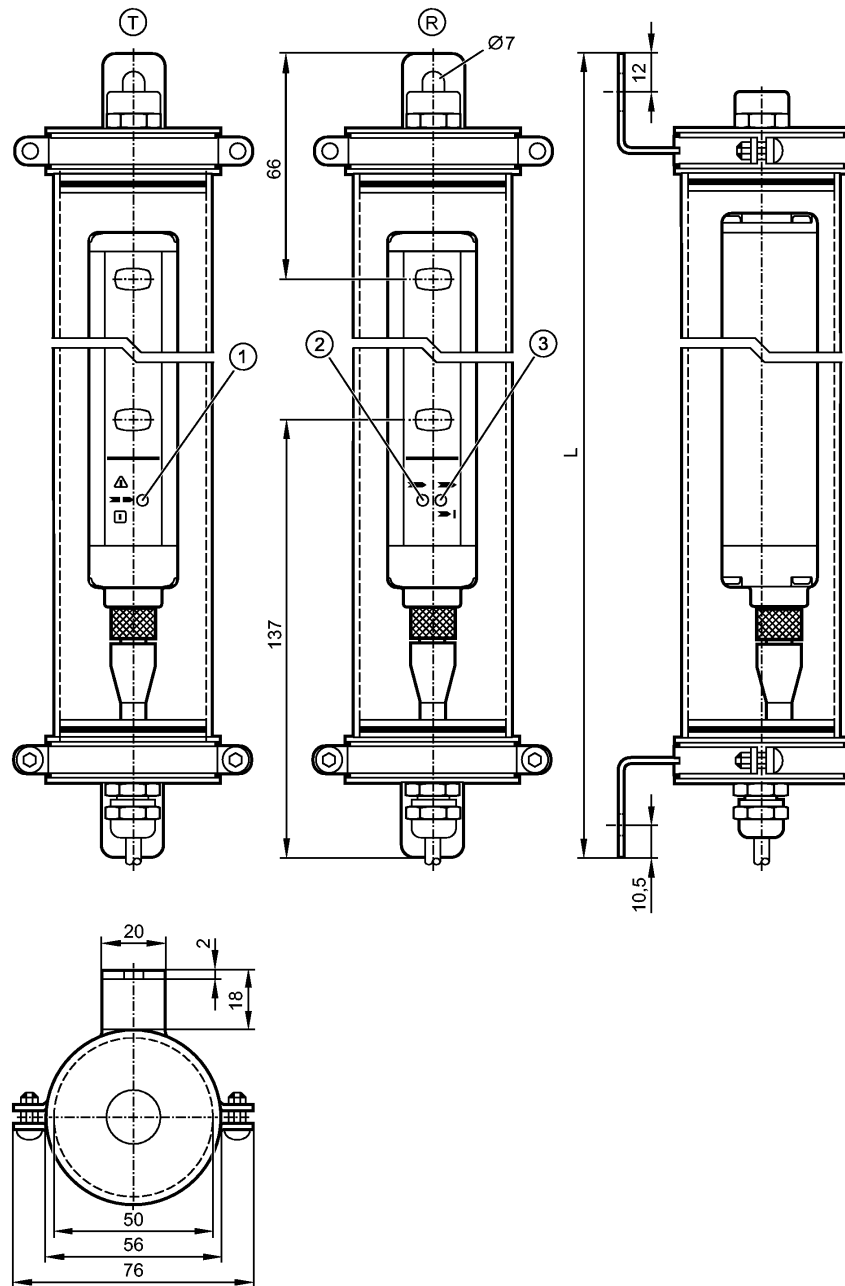


OY431S

OYA0160-30-2-09-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 curtain

Length L: 337 mm

Cable

with IP69K protective tube

Complies with the requirements:

type 2 (IEC 61496-1)

SILCl 1 (IEC 62061)

OY431S

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

Photoelectric sensors

PL c (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]	83
- Receiver [mA]	83
- Heating [mA]	83
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
Monitoring range	
Protected area height [mm]	160
Resolution (detection capacity d)[mm]	30
Protected area width (range) [m]	0...3 / 2...10
Reaction times	
Response time [ms]	4.5
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]	2.0E-08
MTTFd [Years]	100
DC/CCF/Cat.	91.3% / 80 % / 2
Mechanical data	
Length L [mm]	337
Housing materials	protective tube: PMMA transparent; Protective cap: POM; bracket: stainless steel (316L); sealing: silicone
Weight [kg]	2.94
Displays / operating elements	
Display	Transmitter 1 LED Receiver 2 LED
Electrical connection	

OY431S

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

Photoelectric sensors

Transmitter

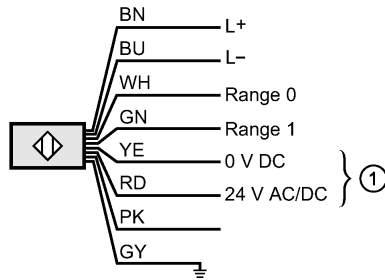
Connection

PVC cable / 15 m; 8 x 0.34 mm²

Wiring Transmitter

Core colors

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



1: Heating
PK: not used

Receiver

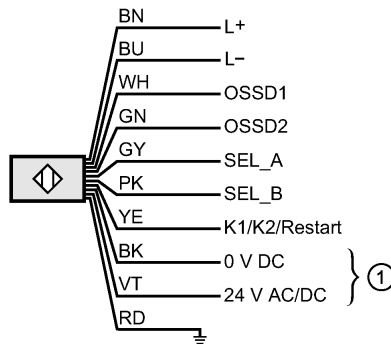
Connection

PVC cable / 15 m; 10 x 0.34 mm²

Wiring Receiver

Core colors

- 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