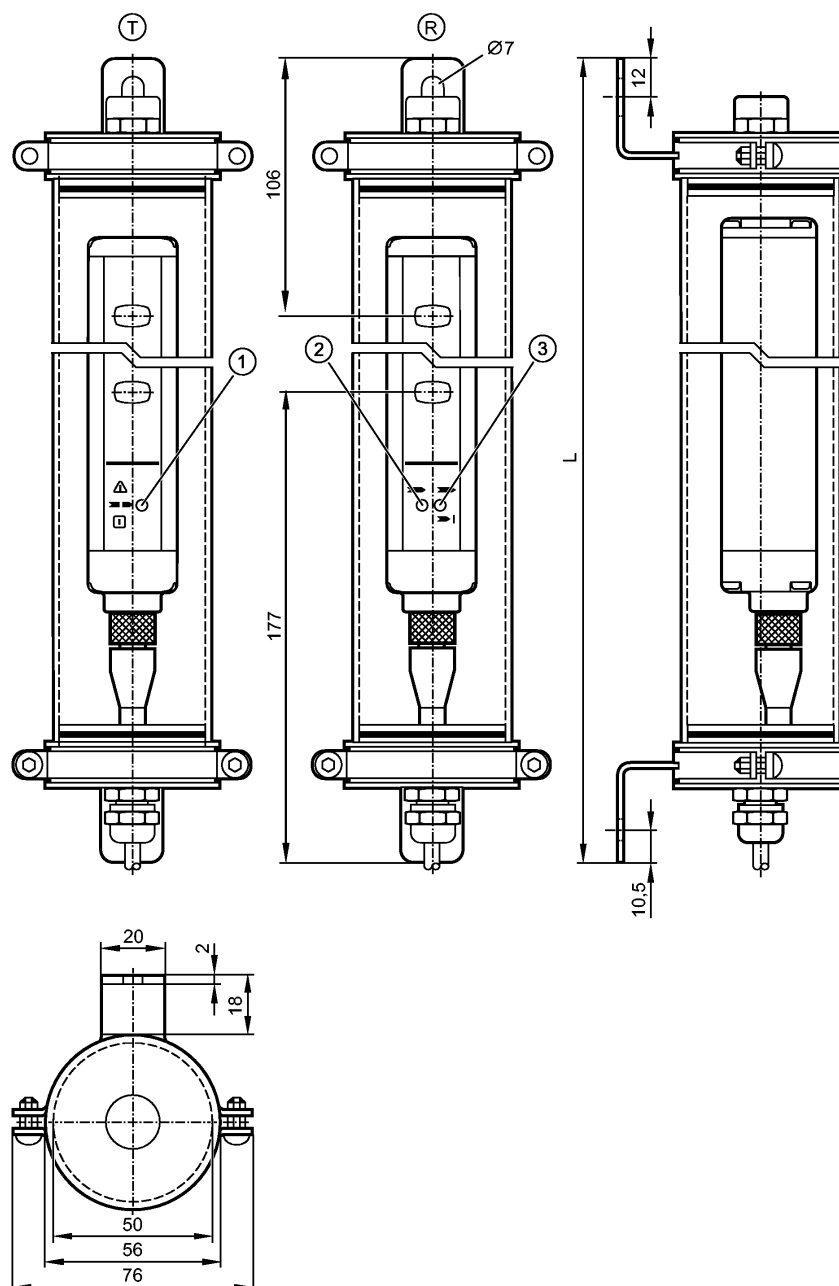


OY412S

OYA0810-03-2-09-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 grid

Length L: 1070 mm

Cable

with IP69K protective tube

Complies with the requirements:

type 2 (IEC 61496-1)

SIL 2 (IEC 61508)

OY412S

OYA0810-03-2-09-P-1-A

Photoelectric sensors

SILCl 2 (IEC 62061)

PL d (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]		417
- Receiver [mA]		83
- Heating [mA]		417
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]		810
Number of beams		3
Protected area width (range) [m]		0...3 / 2...10
Reaction times		
Response time [ms]		3.5
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]		1.9E-08
MTTFd [Years]		100
DC/CCF/Cat.		94.6% / 80% / 2
Mechanical data		
Length L [mm]		1070
Housing materials		protective tube: PMMA transparent; Protective cap: POM; bracket: stainless steel (316L); sealing: silicone
Weight [kg]		5.635
Displays / operating elements		
Display		LED yellow LED green LED Red

OY412S

OYA0810-03-2-09-P-1-A

Photoelectric sensors

Electrical connection

Transmitter

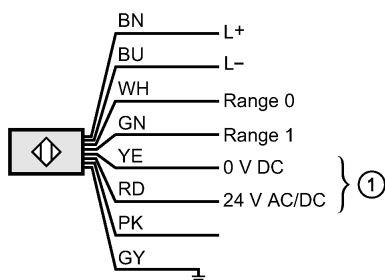
Connection

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

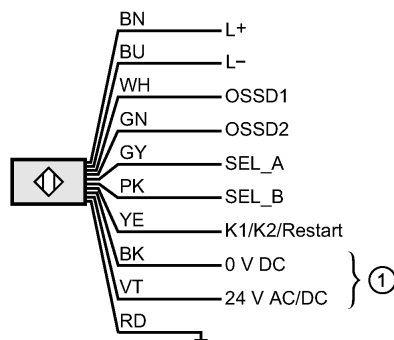
Connection

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