

- 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: 1833 mm

Cable

with IP69K protective tube

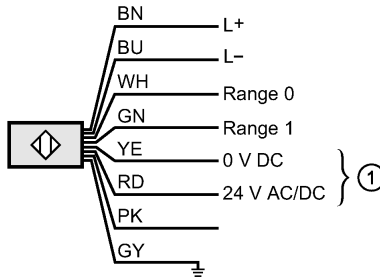
Complies with the requirements:

OY451S - Safety light curtain - eclass: 27270910 / 27-27-09-10

type 4 (IEC 61496-1)	
SIL 3 (IEC 61508)	
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]	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]	1660
Resolution (detection capacity d)[mm]	40
Protected area width (range) [m]	0...7 / 3...15
Reaction times	
Response time [ms]	14
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]	1.5E-08
MTTFd [Years]	100
DC/CCF/Cat.	97.6 % / 80 % / 4
Mechanical data	
Length L [mm]	1833
Housing materials	protective tube: PMMA transparent; Protective cap: POM; bracket: stainless steel (316L); sealing: silicone
Weight [kg]	4.5
Displays / operating elements	
Display	Transmitter 1 LED Receiver 2 LED
Electrical connection	
Transmitter	
Connection	PVC cable / 15 m; 8 x 0.34 mm ²
Wiring Transmitter	

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

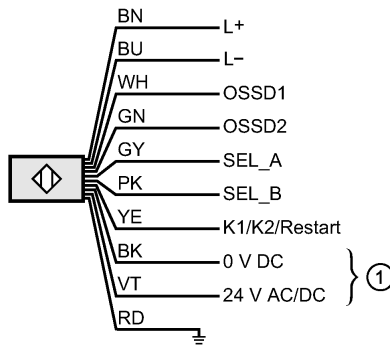


1: Heating
 PK: not used

Receiver	
Connection	PVC cable / 15 m; 10 x 0.34 mm ²

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 mm ²
Pack quantity [piece]	1