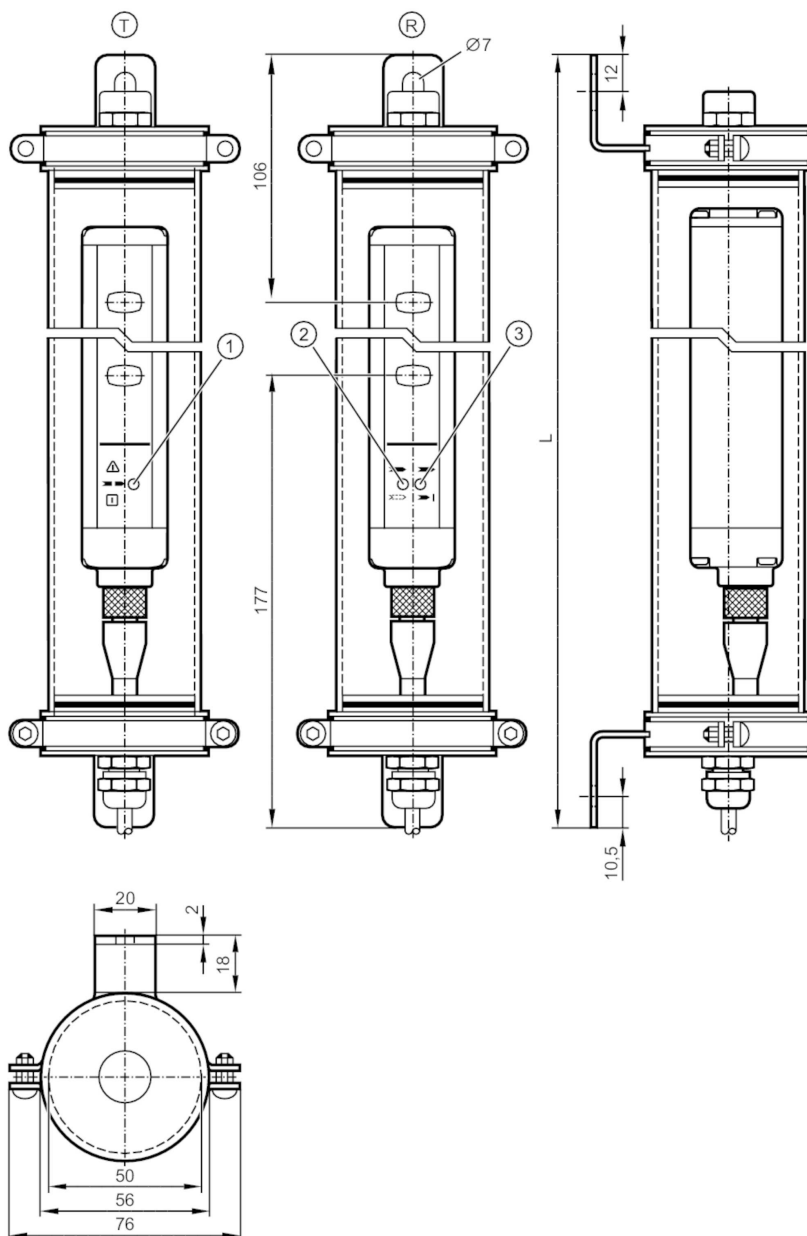


# OY421S



## Safety light grid

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



- T transmitter
- R receiver
- 1 LED three-color red / green / orange
- 2 LED 2-color yellow/blue
- 3 LED 2-color red/green



### Product characteristics

Type of light	Infrared light
Electrical design	PNP
Protection	IP 65; IP 67; IP 69K; (with protective tube: IP 69K)

### Application

Protective function	Access prevention body protection
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## Safety light grid

OYA0510-02-4-15-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]	333
Transmitter		
Current consumption	[mA]	42
Current consumption heating	[mA]	333
Outputs		
Electrical design		PNP
Number of OSSD outputs		2
Max. current load per OSSD output	[mA]	400; (24 V)
Short-circuit protection		yes
Monitoring range		
Protected area height	[mm]	510
Number of beams		2
Protection area width (low light intensity)	[m]	0...7
Protection area width (high light intensity)	[m]	3...15
Reaction times		
Response time	[ms]	2.5
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)		4
Complies with the requirements		ISO 13849-1: 2015 Category 4, PL e
		IEC 61508 SIL 3
		IEC 62061 SIL 3
Mission time TM	[h]	175200
PFH	[1/h]	9,2E-09

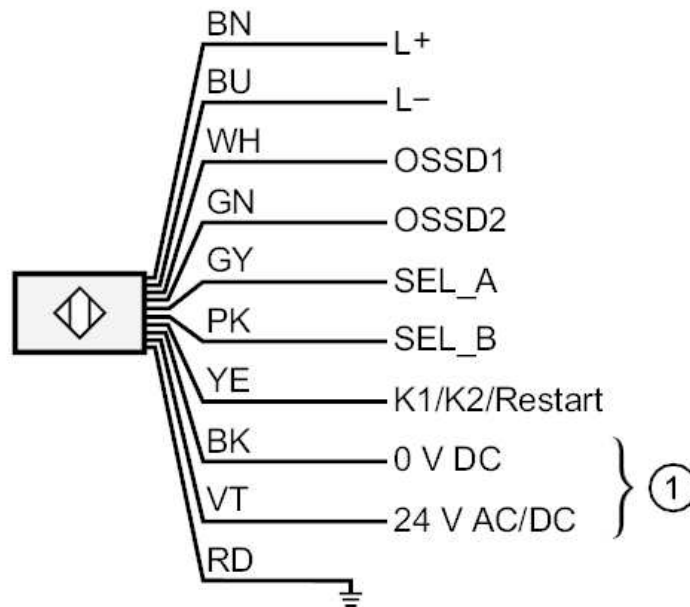
# OY421S



## Safety light grid

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

Mechanical data		
Weight	[g]	4700
Dimensions	[mm]	777 x 76 x 74
Material		protective tube: PMMA transparent; Protective cap: POM; clamp: stainless steel (1.4404 / 316L); sealing: silicone
Length L	[mm]	777
Displays / operating elements		
Display	transmitter	1 x LED
	receiver	2 x LED
Remarks		
Pack quantity		1 pcs.
Electrical connection - receiver		
Cable: 15 m, PVC; Maximum cable length: 100 m; 10 x 0.34 mm <sup>2</sup>		
Connection		



1:	Heating
	Core colors :
BK =	black
BN =	brown
BU =	blue
GN =	green
GY =	grey
PK =	pink
RD =	red
VT =	lilac
WH =	white
YE =	yellow

# OY421S



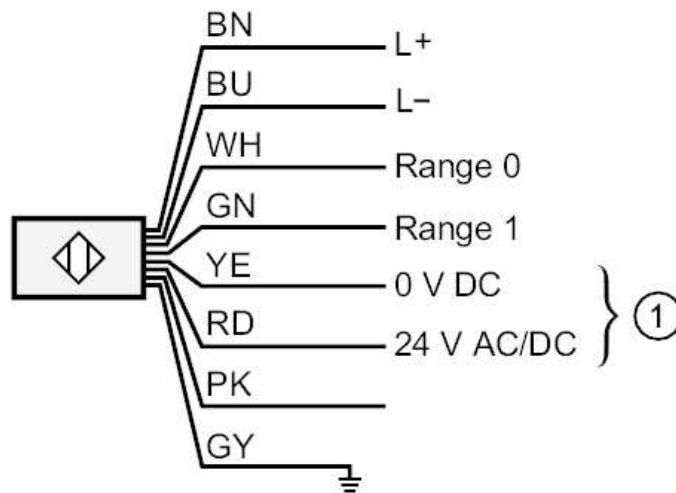
## Safety light grid

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

### Electrical connection - transmitter

Cable: 15 m, PVC; 8 x 0.34 mm<sup>2</sup>

### Connection



- 1: Heating  
PK: not used  
Core colors :
- BN = brown  
BU = blue  
GN = green  
GY = grey  
PK = pink  
RD = red  
WH = white  
YE = yellow