



**Model Number**

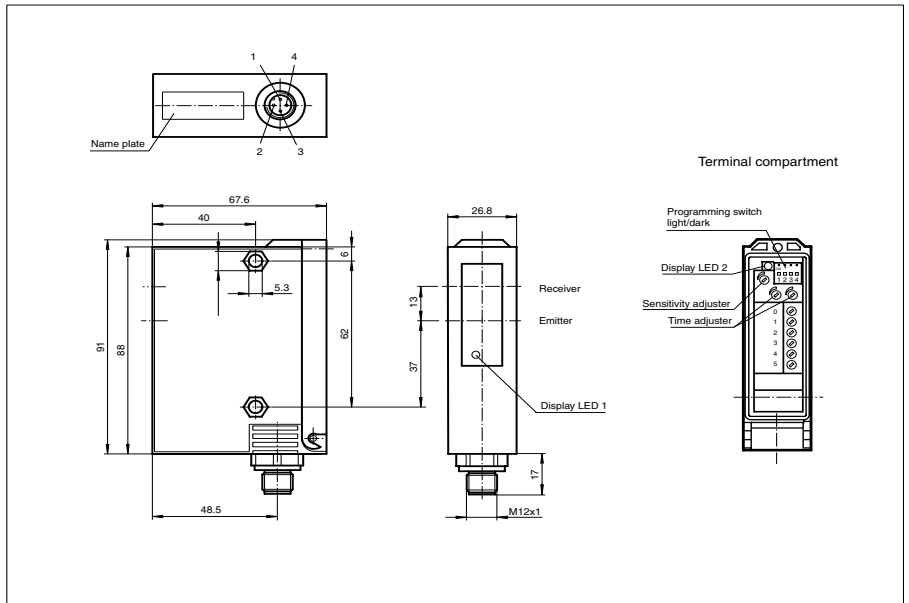
**RL24-8-2000/49/92**

Diffuse mode sensor  
with M12, 4-pin metal connector

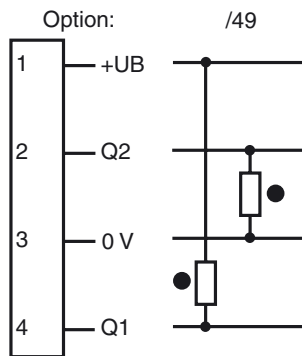
**Features**

- Detection range 10 mm ... 2000 mm, adjustable
- Sturdy plastic housing
- Sensitivity adjuster and light-/dark switch
- Pre-fault indication
- 4 programmable time functions

**Dimensions**

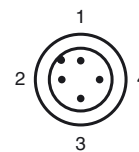


**Electrical connection**



○ = Light on  
 ● = Dark on

**Pinout**



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## Technical data

### General specifications

Detection range	10 ... 2000 mm
Light source	LED
Approvals	CE
USA	UL
Kanada	CSA
Adjustment range	600 ... 2000 mm
Light type	red, modulated light
Diameter of the light spot	approx. 40 mm at 2000 mm detection range
Angle of divergence	approx. 1.4 °
Ambient light limit	35000 Lux

### Indicators/operating means

Function display	LED yellow, frontal and in the terminal compartment, lit up when light beam is free, flashing when falling short of the stability control
Operating elements	Programming switch for light/dark ON, timer functions
Operating elements	2 potentiometers for timer functions
Operating elements	1 Potentiometer as sensitivity adjuster

### Electrical specifications

Operating voltage	$U_B$	10 ... 30 V DC
Ripple		10 %
No-load supply current	$I_0$	55 mA

### Output

Switching type	light/dark switching	
Signal output	1 npn, 1 pnp synchronised-switching, short-circuit proof, protected against reverse polarity	
Switching voltage	30 V DC	
Switching current	max. 200 mA	
Switching frequency	f	250 Hz
Response time		2 ms
Timer function		GAN, GAB, IAB, GAN-GAB, programmable adjustment range 0.1 ... 10 s

### Standard conformity

Standards	EN 60947-5-2
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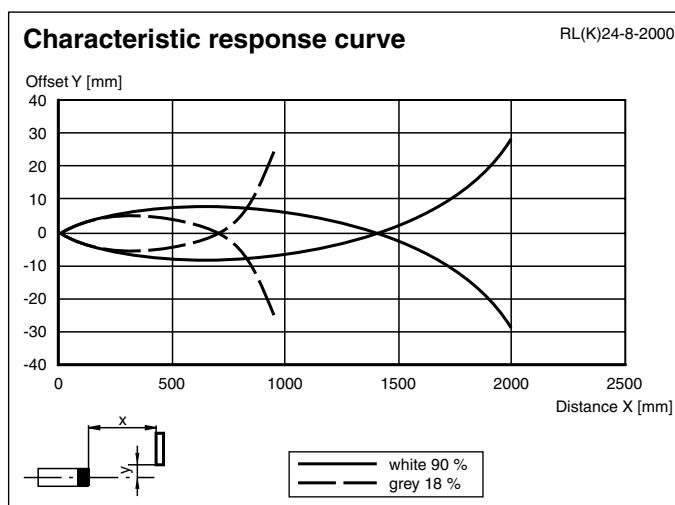
### Ambient conditions

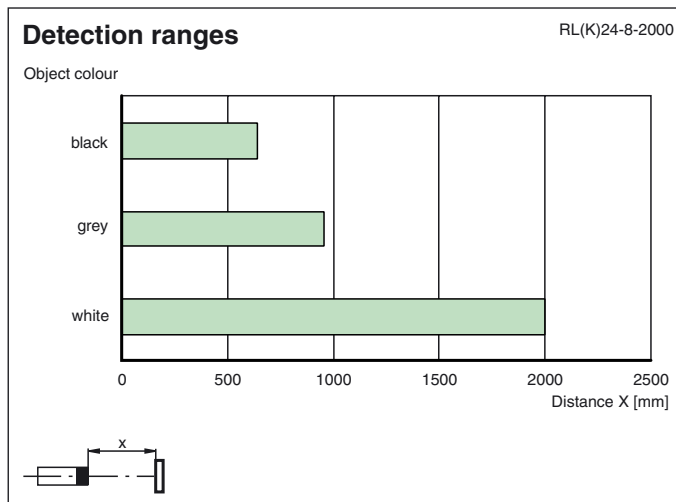
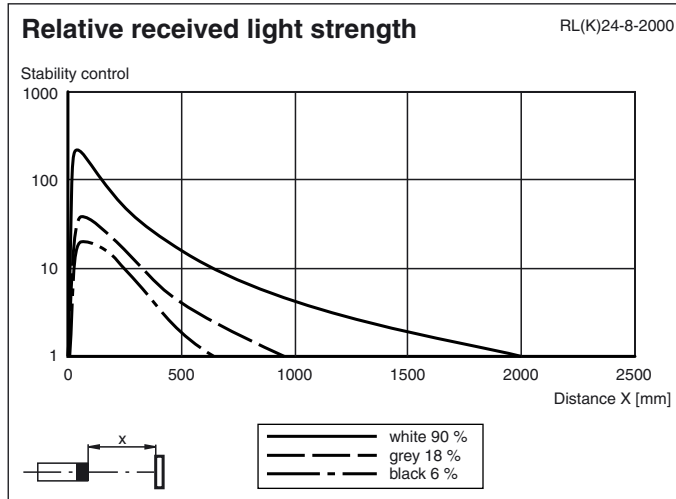
Ambient temperature	-20 ... 60 °C (253 ... 333 K)
Storage temperature	-20 ... 75 °C (253 ... 348 K)

### Mechanical specifications

Protection degree	IP65
Connection	M12 connector, 4-pin
Material	
Housing	GF17
Optical face	glass
Mass	100 g

## Curves / Diagrams





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