



**Model Number**

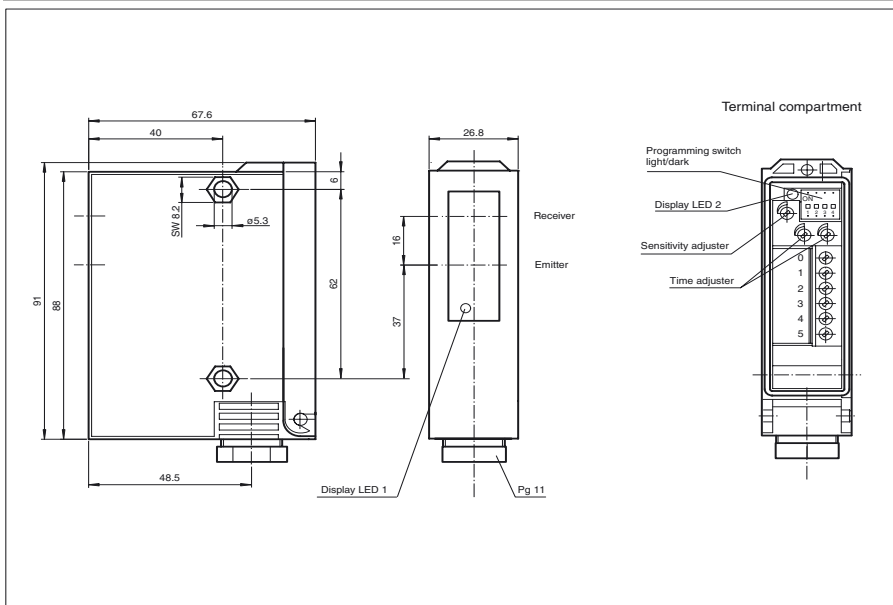
**RL24-8-H-80/49/76b/116**

Background suppression sensor with terminal compartment

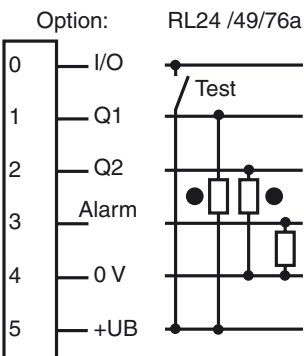
**Features**

- Sensing ranges 80 mm or 150 mm
- Sturdy plastic housing
- Sensitivity adjuster and light-/dark switch
- Pre-fault indication and output
- 4 programmable time functions
- Operating voltage 10;V ...;30;V;DC or 12;V ...;240;V;AC/DC

**Dimensions**



**Electrical connection**



○ = Light on  
● = Dark on

Release date: 2009-08-18 16:18 Date of issue: 2009-08-18 419592\_ENG.xml

## Technical data

### General specifications

Detection range	20 ... 80 mm
Detection range min.	20 ... 80 mm
Detection range max.	20 ... 90 mm
Light source	LED
Black/White difference (6 %/90 %)	< 10 %
Approvals	CE
USA	UL
Kanada	CSA
Background suppression	starts from 90 mm
Light type	red, modulated light
Diameter of the light spot	approx. 5 mm at 300 m detection range
Angle of divergence	approx. 1.4 °
Ambient light limit	100000 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

### Input

Test input	Emitter deactivation
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### Output

Output of the pre-fault indication	1 npn	
Switching type	Light/dark ON, switchable	
Signal output	1 npn, 1 npn 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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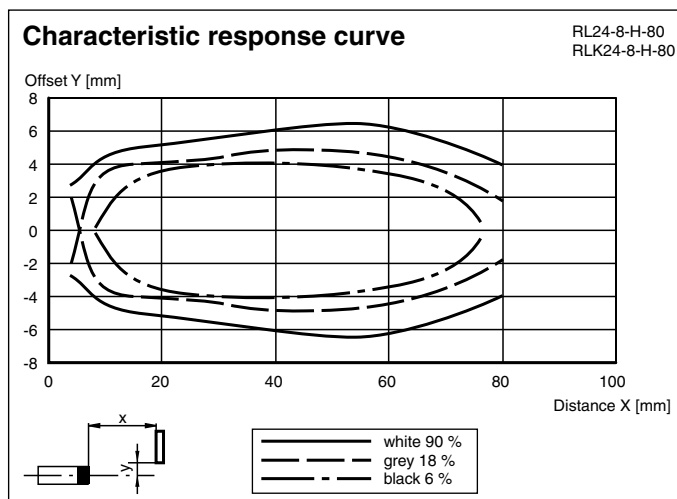
### Ambient conditions

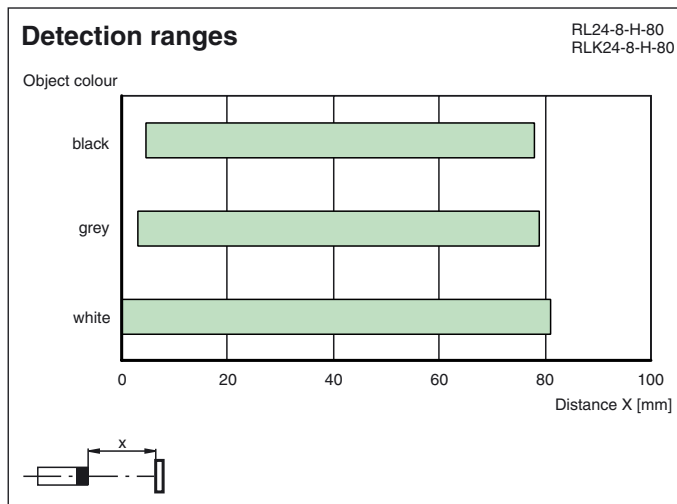
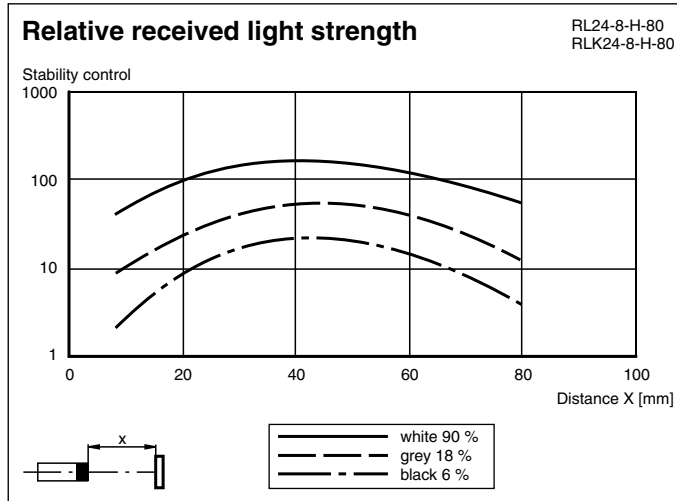
Ambient temperature	-20 ... 60 °C (253 ... 333 K)
Storage temperature	-20 ... 75 °C (253 ... 348 K)

### Mechanical specifications

Protection degree	IP65
Connection	terminal compartment
Material	
Housing	GF17
Optical face	glass
Mass	100 g

## Curves/Diagrams





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