



Model Number

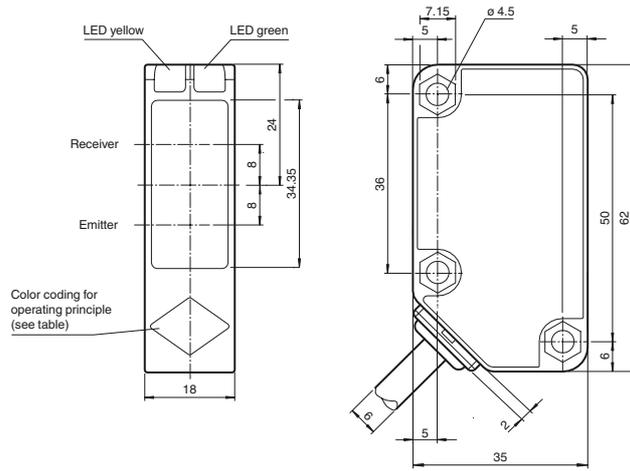
RLK31-8-2500-IR/31/33/115-7M

Diffuse mode sensor
with 7 m fixed cable

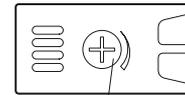
Features

- Operating voltage AC / DC
- Highly visible LED
- Relay output, 1 potential free alternator
- Compact and stable housing
- Protection class II

Dimensions



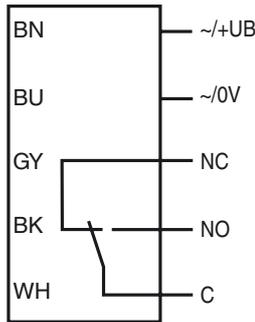
Operating principle	color
Retroreflective sensor	green
Retroreflective sensor without polarization filter	blue
Diffuse type sensor	white
Thru-beam sensor	grey
Convergent beam sensor	red



Sensing range adjustment

Electrical connection

Option:



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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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Technical data**General specifications**

Detection range	0 ... 2500 mm adjustable
Reference target	standard white 200 mm x 200 mm
Light source	IREL
Light type	modulated infrared light , 850 nm
Polarization filter	no
Diameter of the light spot	approx. 50 mm at a distance of 2.5 m
Angle of divergence	2 °
Ambient light limit	50000 Lux ; according EN 60947-5-2

Functional safety related parameters

MTTF _d	790 a
Mission Time (T _M)	20 a
Diagnostic Coverage (DC)	0 %

Indicators/operating means

Operation indicator	LED green: power on
Function indicator	LED yellow, lights up with receiver lit
Control elements	Sensing range adjuster

Electrical specifications

Operating voltage	U _B	24 ... 240 V AC 12 ... 240 V DC
No-load supply current	I ₀	≤ 40 mA
Power consumption	P ₀	≤ 2 VA

Output

Switching type	light on	
Signal output	Relay, 1 alternator	
Switching voltage	max. 240 V AC/DC	
Switching current	max. 3 A	
Switching power	DC: max. 150 W AC: max. 750 VA	
Switching frequency	f	≤ 20 Hz
Response time		≤ 25 ms

Conformity

Product standard	EN 60947-5-2
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Ambient conditions

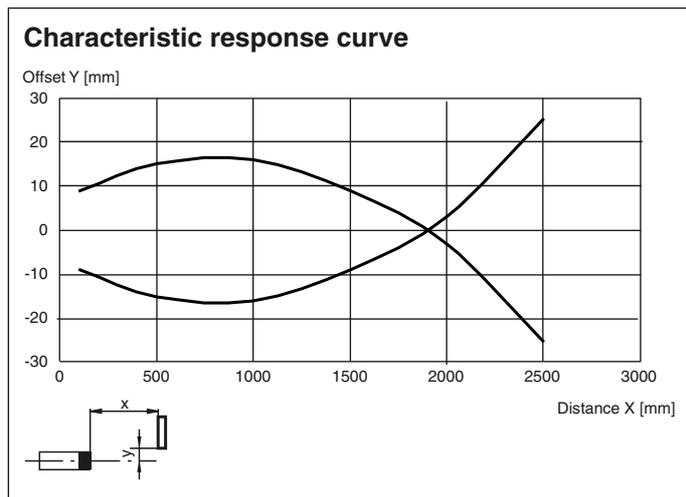
Ambient temperature	-25 ... 55 °C (-13 ... 131 °F)
Storage temperature	-40 ... 70 °C (-40 ... 158 °F)

Mechanical specifications

Housing width	18 mm
Housing height	62 mm
Housing depth	35 mm
Degree of protection	IP67
Connection	7 m fixed cable , 5-wire
Material	
Housing	Polycarbonate
Optical face	PMMA
Mass	480 g

Approvals and certificates

Protection class	II , rated voltage ≤ 250 V AC with pollution degree 1-2 according to IEC 60664-1 Output circuit basis insulation of input circuit according to EN 50178, rated insulation voltage 240 V AC
CCC approval	Certified by China Compulsory Certification (CCC)

Curves/Diagrams**Accessories**

OMH-RL31-01
Mounting bracket

OMH-RL31-02
Mounting bracket narrow

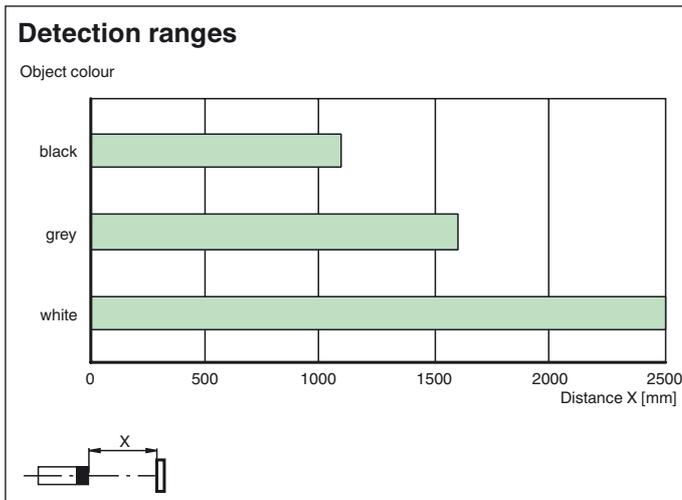
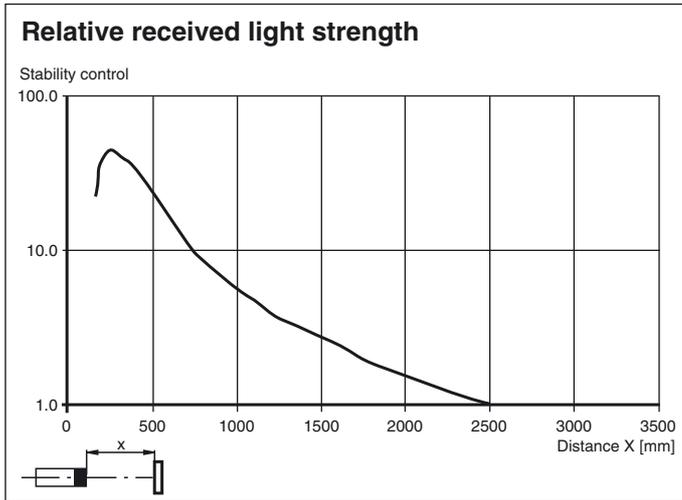
OMH-RL31-03
Mounting bracket narrow

OMH-RL31-04
Mounting aid for round steel ø 12 mm or sheet 1.5 mm ... 3 mm

OMH-RL31-05
Mounting bracket for mounting on flat surfaces with 2 M4 screws

OMH-RL31-06
Stainless steel mounting bracket with adjustable half clamp on the side

Additional accessories can be found in the Internet.



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