



Diffuse mode sensor RLK31-8-2500-IR/31/115

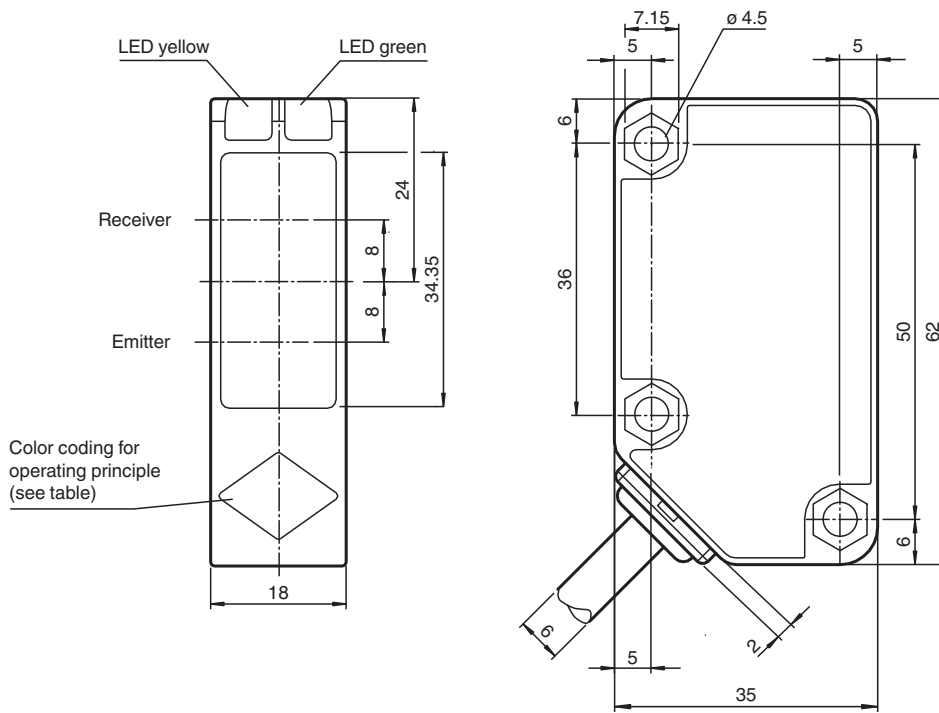


- Operating voltage AC / DC
- Highly visible LED
- Relay output, 1 potential free alternator
- Compact and stable housing
- Protection class II

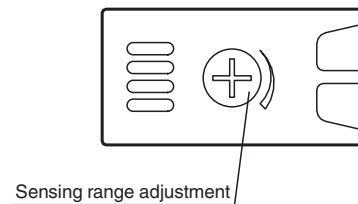
Diffuse mode sensor, plastic housing, 2500 mm adjustable detection range, AC/DC version, infrared light, light on, relay contact output, fixed cable



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



Technical Data

General specifications

Detection range 0 ... 2500 mm adjustable

Release date: 2022-08-03 Date of issue: 2022-08-03 Filename: 205234_eng.pdf

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

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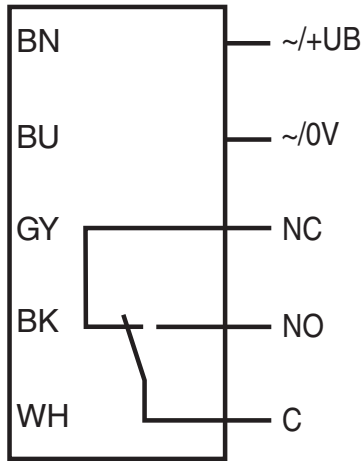
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Technical Data

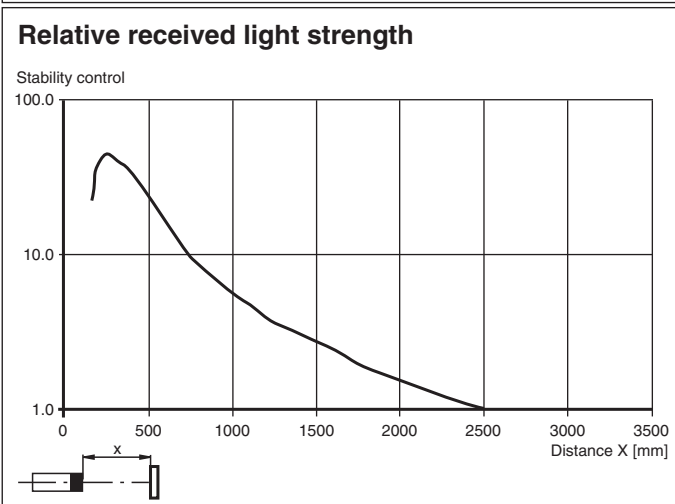
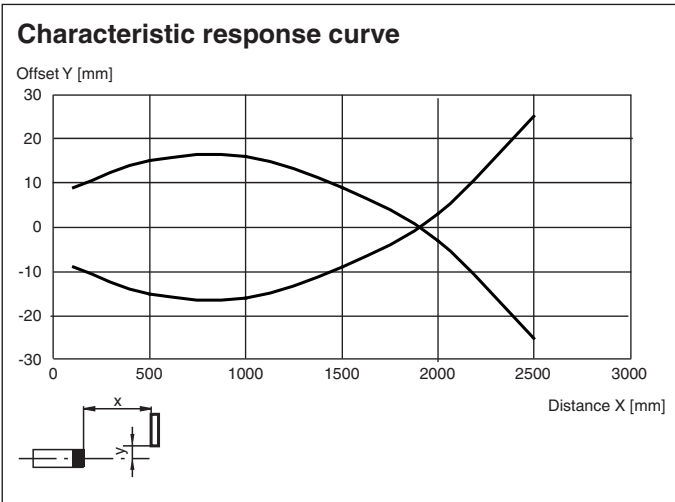
Reference target		standard white 200 mm x 200 mm
Light source		IREL
Light type		modulated infrared light , 850 nm
Polarization filter		no
Diameter of the light spot		approx. 50 mm at a distance of 2.5 m
Opening angle		2 °
Ambient light limit		50000 Lux ; according EN 60947-5-2
Functional safety related 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
Approvals and certificates		
EAC conformity		TR CU 020/2011 TR CU 004/2011
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)
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		Fixed cable 1.94 m , 5-wire
Material		
Housing		Polycarbonate
Optical face		PMMA
Mass		155 g

Connection Assignment

Option:

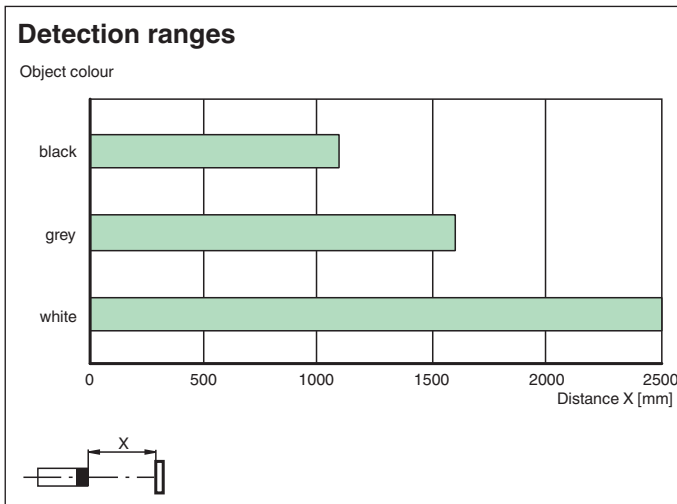


Characteristic Curve









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Characteristic Curve



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 \varnothing 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