



Model Number

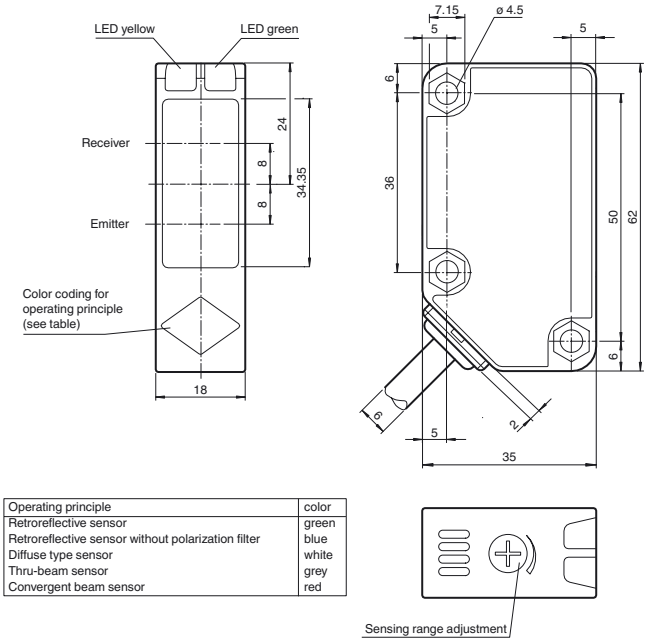
RLK31-8-1200-RT/31/115

Diffuse mode sensor
with 2 m fixed cable

Features

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

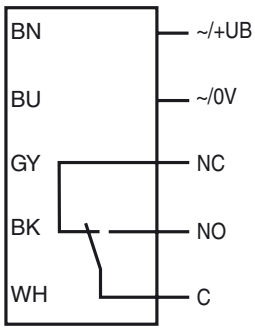
Dimensions



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

Electrical connection

Option:



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Technical data

General specifications		
Detection range		0 ... 1200 mm adjustable
Detection range max.		0 ... 1200 mm
Reference target		standard white, 100 mm x 100 mm
Light source		LED
Light type		modulated visible red light , 630 nm
Polarization filter		no
Diameter of the light spot		approx. 25 mm at a distance of 1.2 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		Detection 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
Ambient conditions		
Ambient temperature		-25 ... 55 °C (-13 ... 131 °F)
Storage temperature		-40 ... 70 °C (-40 ... 158 °F)
Mechanical specifications		
Degree of protection		IP67
Connection		2 m fixed cable , 5-wire
Material		
Housing		Polycarbonate
Optical face		PMMA
Mass		155 g
Compliance with standards and directives		
Directive conformity		
EMC Directive 2004/108/EC		EN 60947-5-2
Standard conformity		
Standards		EN 62103
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)

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 with M10 threaded rod

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

Additional accessories can be found in the Internet.

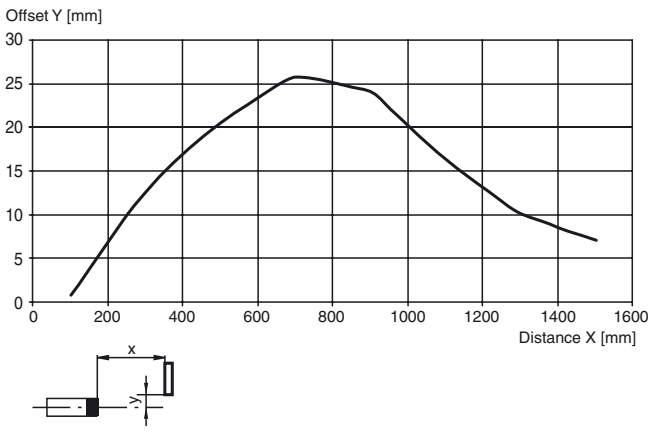
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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".
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Curves/Diagrams

Characteristic response curve

RLK31-8/31/...115



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