



Model Number

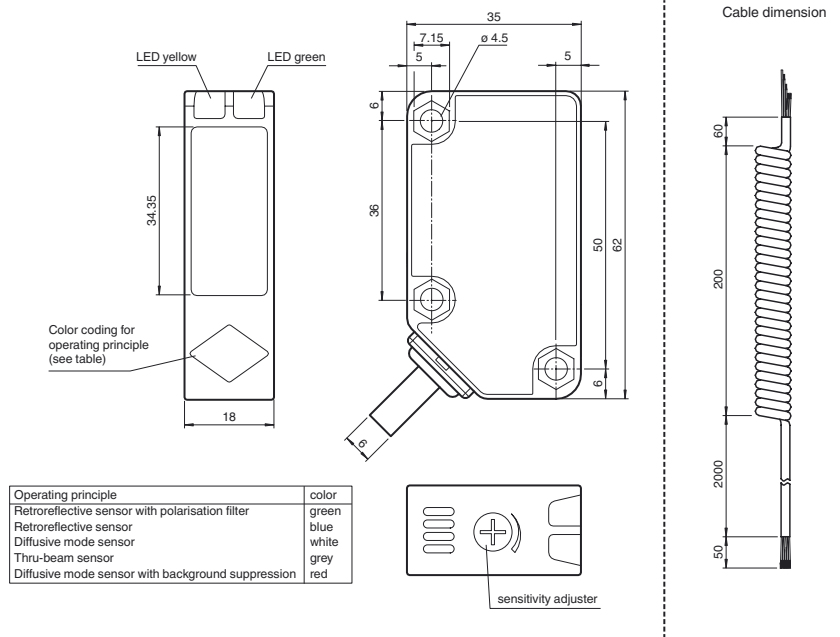
RLK31-8-2500-IR-3953/31

Diffuse mode sensor
with spiral cable

Features

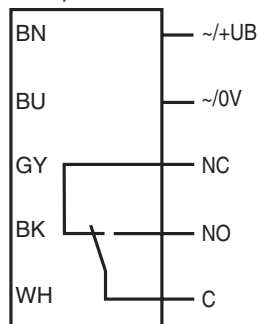
- Operating voltage AC / DC
- Highly visible LED
- Relay output, 1 potential free alternator
- Compact and stable housing
- Spiral cable

Dimensions



Electrical connection

Option:



Technical data

General specifications

Detection range	0 ... 2500 mm adjustable
Reference target	standard white 200 mm 200 mm
Light source	IREd
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	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	Coiled cable 4 m , 5-wire
Material	
Housing	Polycarbonate
Optical face	PMMA
Mass	350 g

Compliance with standards and directives

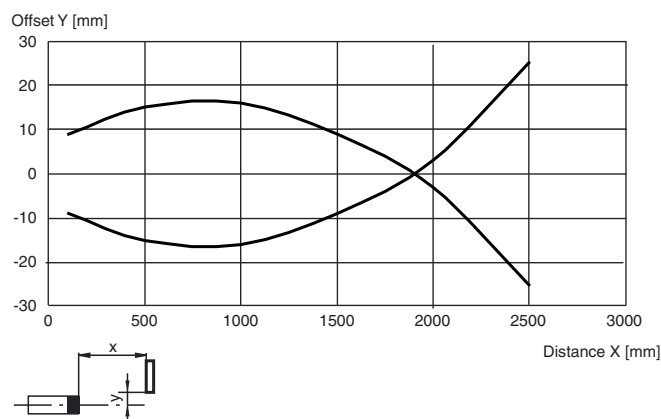
Directive conformity	EMC Directive 2004/108/EC
Standard conformity	
Product standard	EN 60947-5-2:2007 IEC 60947-5-2:2007
Standards	EN 62103

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
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Curves/Diagrams

Characteristic response 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 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

Other suitable accessories can be found at www.pepperl-fuchs.com

