



Model Number

RLK91-54-RT/31/59/115

Retroreflective sensor
with 5 m fixed cable

Features

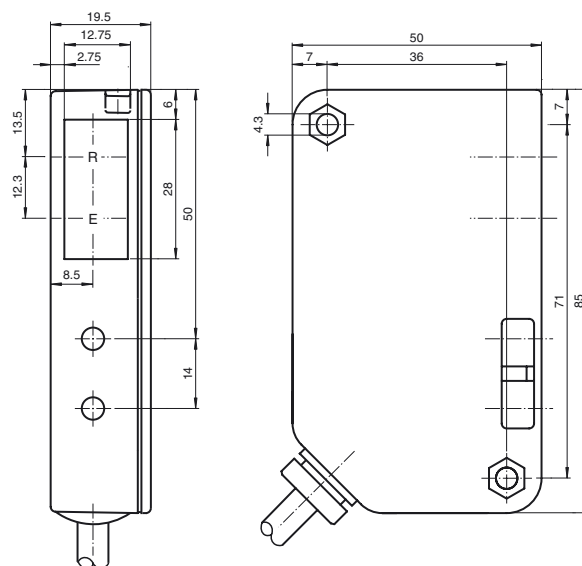
- Retroreflective sensor for single-beam closing edge protection
- Narrow housing suitable for small gaps
- Sturdy plastic housing
- Various possibilities for mounting
- Version with red light
- Version with AC/DC power supply

Product information

Concentration on the essentials is the hallmark of the 91 series. As ac/dc supply devices, these economical, reliable and easy-to-use photoelectric sensors can be used almost universally. Their narrow design means that they can be used in any environment.

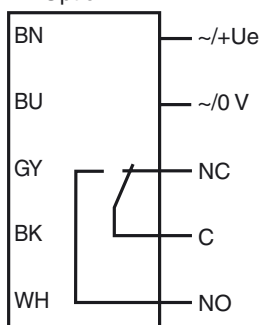
The single-beam photoelectric sensors of the 91 series are suitable for closing-edge monitoring for elevators, barriers and doors, as well as for object detection and object tracking in material handling systems.

Dimensions

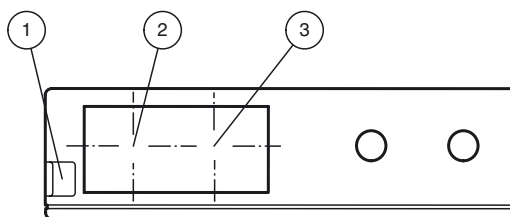


Electrical connection

Option:



Indicators/operating means



1	Functional display	red
2	Optical axis Receiver	
3	Optical axis Transmitter	

Technical data

General specifications

Effective detection range	0 ... 4 m
Reflector distance	0.2 ... 4000 mm
Threshold detection range	8 m
Reference target	H85-2 reflector
Light source	LED
Light type	modulated visible red light
Diameter of the light spot	approx. 160 mm at a distance of 4000 mm
Angle of divergence	approx. 2.5 °
Ambient light limit	90000 Lux

Functional safety related parameters

MTTF _d	1083.4 a
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Indicators/operating means

Function indicator	LED red, flashes when falling short of the stability control
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Electrical specifications

Rated operating voltage	U _e	96 ... 240 V AC
Power consumption	P ₀	12 VA
Contact ratings		according to UL 508 1/8 HP, 1.9 FLA, 240 V AC, Pilot Duty Code D150 6,000 1.5 FLA, 120 V AC, Pilot Duty 30,000 0.8 FLA, 240 V AC, Pilot Duty 30,000

Output

Switching type	dark on
Signal output	Weak current relay, 1 alternator
Switching voltage	max. 240 V AC
Switching current	2.5 A / 240 V AC
Switching power	max. 120 W / 600 VA
Switching frequency	f 25 Hz
Response time	20 ms

Ambient conditions

Ambient temperature	-20 ... 55 °C (-4 ... 131 °F)
Storage temperature	-20 ... 75 °C (-4 ... 167 °F)

Mechanical specifications

Degree of protection	IP65
Connection	5 m fixed cable
Material	
Housing	Luran®
Optical face	glass pane
Mass	100 g

Compliance with standards and directives

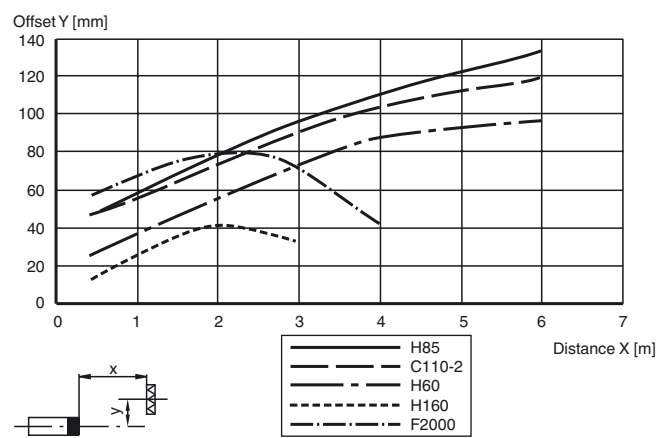
Standard conformity	
Product standard	EN 60947-5-2:2007 IEC 60947-5-2:2007

Approvals and certificates

EAC conformity	TR CU 020/2011 TR CU 004/2011
UL approval	cULus For overcurrent protection, install a fuse with a rated current of max. 5 A and min. 240 V AC
CCC approval	Certified by China Compulsory Certification (CCC)

Curves/Diagrams

Characteristic response curve



Typical applications

- Closing-edge monitoring for elevators, barriers and industrial doors
- Detecting and tracking objects in material handling

Detection area



Accessories

OMH-91

Mounting bracket

REF-H50

Reflector, rectangular 51 mm x 61 mm, mounting holes, fixing strap

REF-H60-2

Reflector with mounting holes

REF-H85-2

Reflector, rectangular 84.5 mm x 84.5 mm, mounting holes

REF-H160

Reflector, rectangular 60 mm x 18 mm, mounting holes

REF-H180

Reflector, rectangular 180 mm x 40 mm, mounting holes

REF-C110-2

Reflector, round ø 84 mm, central mounting hole

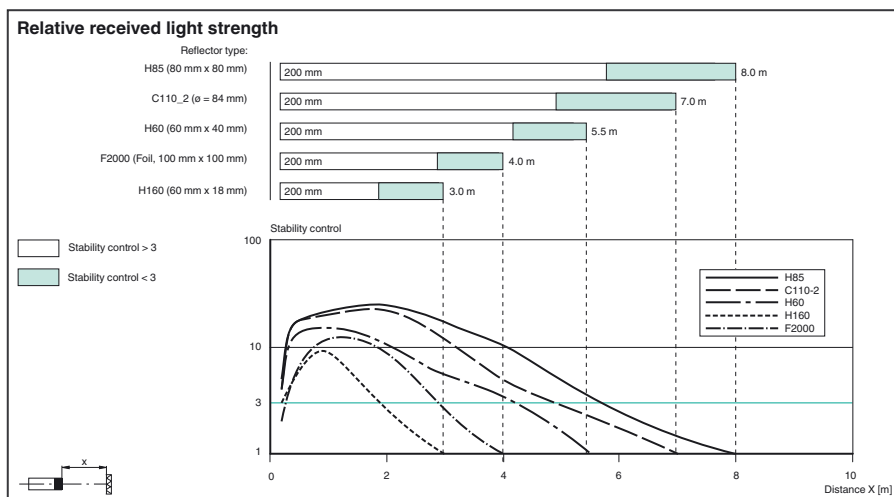
OFR-100/100

Reflective tape 100 mm x 100 mm

Reflector Weather Cap

Weather hood for series reflector

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



Operating principle

The retroreflective sensor contains the transmitter and receiver in a single housing. The light from transmitter is beamed back from a reflector to the receiver. If an object interrupts the light beam the switching function is initiated.