



**Model Number**

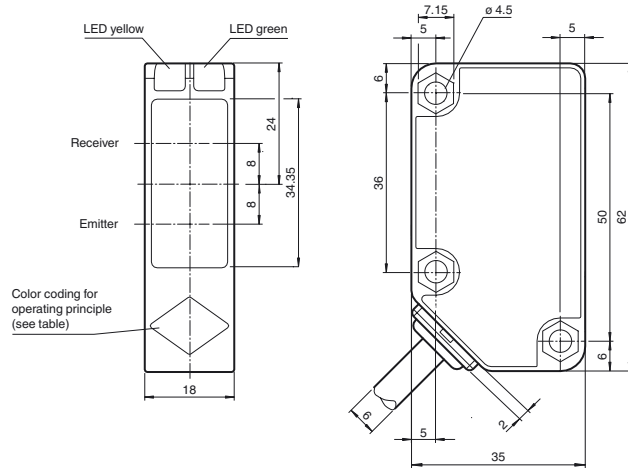
**RLK31-8-1200-RT/31/59/115**

Diffuse mode sensor  
with 2 m fixed cable

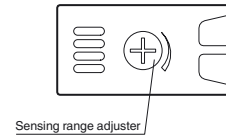
**Features**

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

**Dimensions**

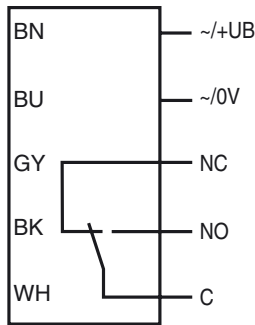


Operating principle	color
Retroreflective sensor with polarisation filter	green
Retroreflective sensor	blue
Diffusive mode sensor	white
Thru-beam sensor	grey
Diffusive mode sensor with background suppression	red



**Electrical connection**

Option:



Release date: 2012-11-28 13:28 Date of issue: 2012-11-28 183063\_eng.xml

**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
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 <sub>d</sub>	790 a
Mission Time (T <sub>M</sub> )	20 a
Diagnostic Coverage (DC)	0 %

**Indicators/operating means**

Operating display	LED green: power on
Function display	LED yellow, lights up with receiver lit
Controls	Detection range adjuster

**Electrical specifications**

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

**Output**

Switching type	dark 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**

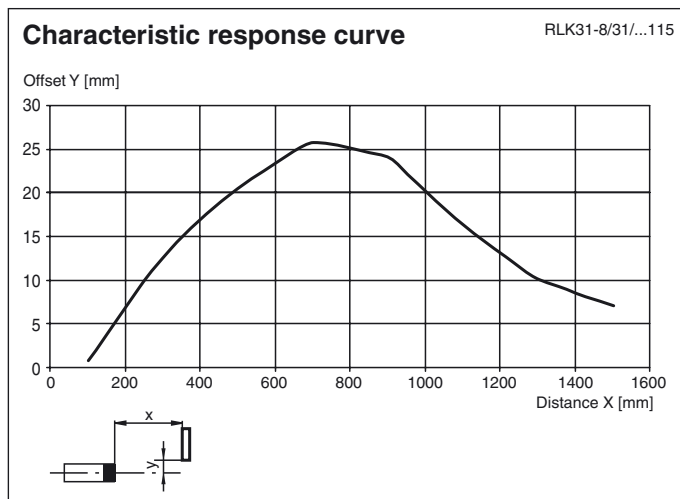
Protection degree	IP67
Connection	2 m fixed cable , 5-wire
Material	
Housing	Polycarbonate
Optical face	PMMA
Mass	155 g

**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)

**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 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.