



**Model Number**

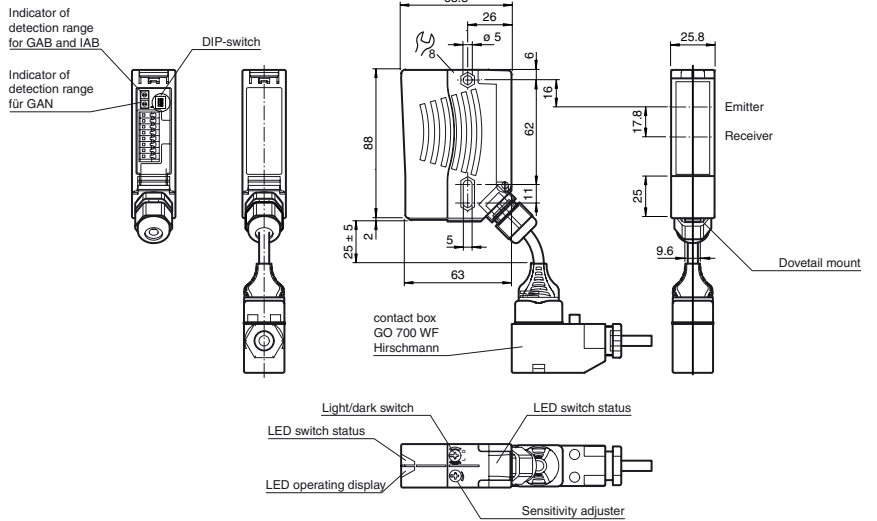
**RLK28-55-Z-2466/31/115d**

Retroreflective sensor  
with 7-pin surface-mounted connector up to  
250 VAC

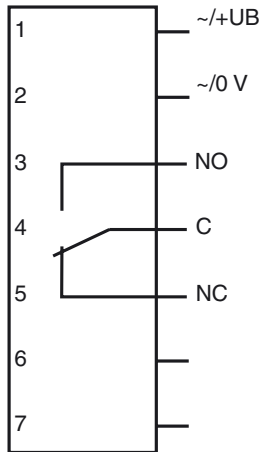
**Features**

- Ultra bright LEDs for power on, pre fault indication and switching state
- Programmable time function GAN, GAB, IAB, as well as GAN-GAB and GAN-IAB as double function
- Not sensitive to ambient light, even with switched energy saving lamps
- Protection class II

**Dimensions**

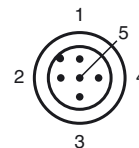


**Electrical connection**



The relay-functions "NC" and "NO" bear on the switching mode "Dark-ON". This complies to the default setting of the light/dark switch (factory setting).

**Pinout**



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Subject to modifications without notice

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**Technical data****General specifications**

Effective detection range	0 ... 17 m
Reflector distance	0.05 ... 17 m
Threshold detection range	21 m

Reference target	H85-2 reflector
Light source	LED
Light type	modulated visible red light , 660 nm
Diameter of the light spot	approx. 290 mm at a distance of 17 m
Angle of divergence	emitter 1.2° receiver 2°
Ambient light limit	80000 Lux

**Functional safety related parameters**

MTTF <sub>d</sub>	940 a
Mission Time (T <sub>M</sub> )	20 a
Diagnostic Coverage (DC)	0 %

**Indicators/operating means**

Operating display	LED green
Function display	2 LEDs yellow, light up when light beam is free, flash when falling short of the stability control, off when light beam is interrupted
Controls	sensitivity adjustment (Adjustment to < 25% of the effective operating range) , Light/Dark switch

**Electrical specifications**

Operating voltage	U <sub>B</sub>	12 ... 240 V AC/DC
Power consumption	P <sub>0</sub>	≤ 3.5 VA

**Output**

Switching type	light/dark on, switchable (selectable, light/dark switching is only activated if the receiver has 'dark on' selected.)	
Signal output	Relay, 1 alternator	
Switching voltage	max. 250 V AC/DC	
Switching current	max. 2 A	
Switching power	DC: max. 50 W AC: max. 500 VA	
Switching frequency	f	25 Hz
Response time	20 ms	
Timer function	ON delay (GAN), OFF delay (GAB), one shot (IAB), ON delay-one shot (GAN-IAB), ON delay-OFF delay (GAN-GAB), programmable adjustment interval 0.1 ... 10 s	

**Ambient conditions**

Ambient temperature	-40 ... 60 °C (-40 ... 140 °F)
Storage temperature	-40 ... 75 °C (-40 ... 167 °F)

**Mechanical specifications**

Protection degree	IP65
Connection	7-pin surface-mounted connector, up to 250 VAC (without cable socket)
Material	
Housing	Plastic ABS
Optical face	Plastic pane
Mass	180 g

**Compliance with standards and directives**

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

**Approvals and certificates**

Protection class	II, rated voltage ≤ 250 V AC with pollution degree 1-2 according to IEC 60664-1 Caution! The protection class 2 is only valid when the terminal compartment is closed.
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**Accessories****OMH-05**

Mounting aid for round steel ø 12 mm or sheet 1.5 mm ... 3 mm

**OMH-07**

Mounting aid for round steel ø 12 mm or sheet 1.5 mm ... 3 mm

**OMH-21**

Mounting bracket

**OMH-22**

Mounting bracket

**OMH-RLK29**

Mounting bracket

**OMH-MLV11-K**

dove tail mounting clamp

**OMH-RLK29-HW**

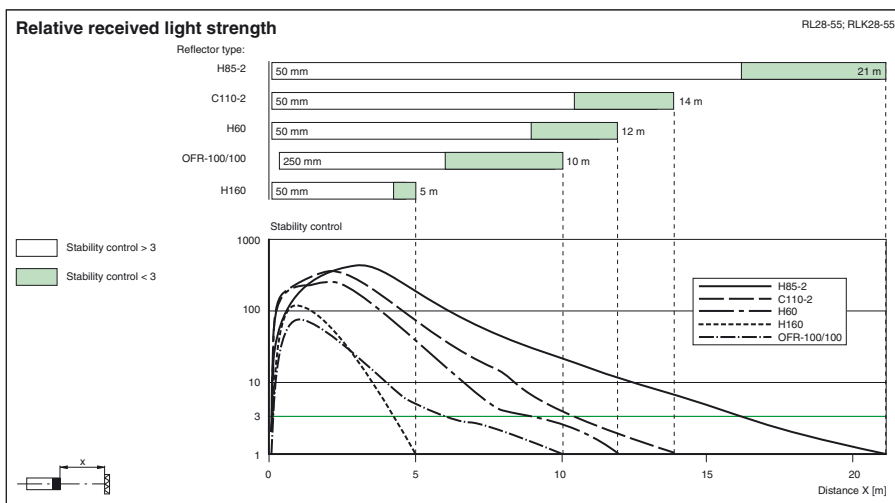
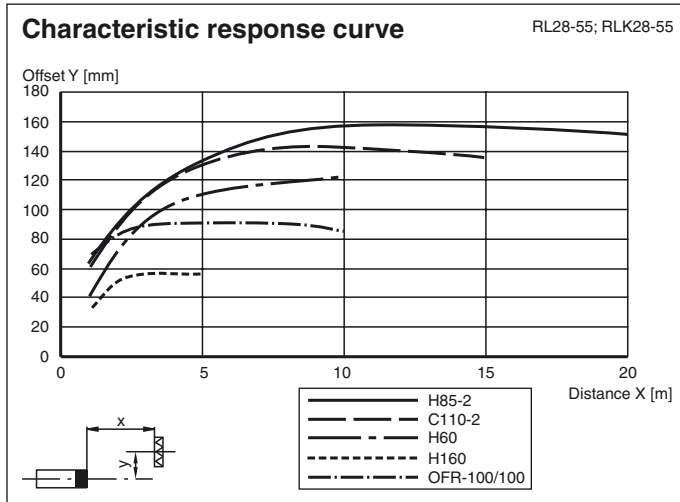
Mounting bracket for rear wall mounting

**OMH-RL28-C**

Weld slag cover model

Other suitable accessories can be found at [www.pepperl-fuchs.com](http://www.pepperl-fuchs.com)

Curves/Diagrams



Timer functions

Timer function	Switching type	Timing diagram	Receiver status
Without 	Light Dark		Receiver exposed Receiver dark ON OFF
ON delay 	Light Dark		ON OFF ON OFF
OFF delay 	Light Dark		ON OFF ON OFF
one shot 	Light Dark		ON OFF ON OFF

Time  $t_{ON}$ ,  $t_{OFF}$  and  $t_{OS}$  are adjustable from 0.1 to 10 seconds.  
 The Light-/Dark-Switch (Left, outer switch) is shown in the "Dark ON" position.

Type	Description	Notes
-Z	OFF delay timer	Adjustable time interval (0.1 s - 10 s)
	one shot timer	
	ON delay timer	
	ON delay timer / OFF delay timer	
	ON delay timer / one shot timer	

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