



Model Number

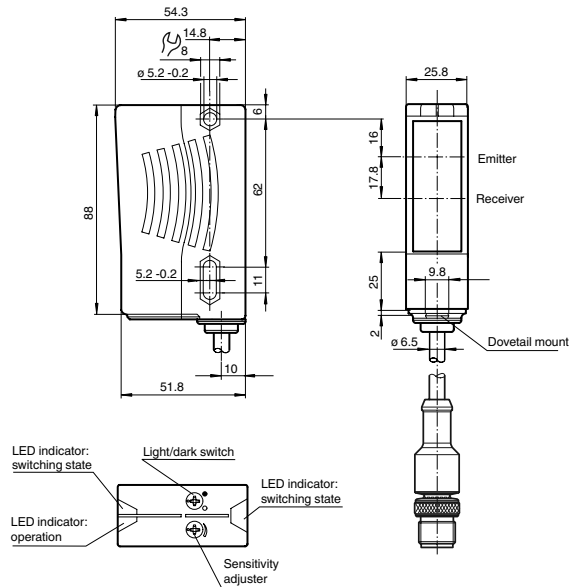
RL28-55/35/47/115b

Retroreflective sensor
with 230 mm fixed cable and 4-pin, M12 x 1
connector

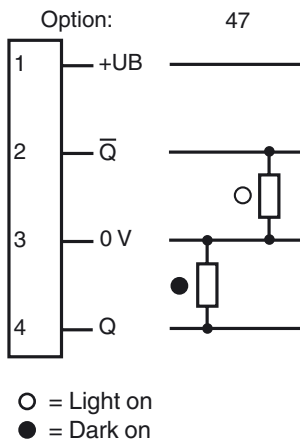
Features

- Clearly visible LEDs for Power ON, switching state and stability control
- Sensitivity adjuster and light/dark switch as standard features of this series
- Not sensitive to ambient light, even with energy saving lamps
- Dove-tail mounts and pass-through mounting holes
- Large temperature range from -40 ... 60 °C (-40 ... 140 °F)
- Sensing range up to 26 m

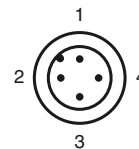
Dimensions



Electrical connection



Pinout



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Subject to modifications without notice

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Technical data**General specifications**

Effective detection range	0 ... 20 m
Reflector distance	0.05 ... 20 m
Threshold detection range	26 m
Reference target	H85-2 reflector
Light source	LED
Light type	modulated visible red light , 660 nm
Diameter of the light spot	approx. 350 mm at a distance of 20 m
Angle of divergence	emitter 1.2° receiver 2°
Ambient light limit	80000 Lux

Functional safety related parameters

MTTF _d	1190 a
Mission Time (T _M)	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 _B	10 ... 30 V DC
Ripple		10 %
No-load supply current	I ₀	≤ 40 mA

Output

Switching type	light/dark on switchable	
Signal output	2 PNP, complementary, short-circuit protected, reverse polarity protected , open collectors	
Switching voltage	max. 30 V DC	
Switching current	max. 200 mA	
Switching frequency	f	250 Hz
Response time		2 ms

Ambient conditions

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

Mechanical specifications

Protection degree	IP67
Connection	fixed cable 230 mm with M12 x 1 male connector, 4-pin
Material	
Housing	Plastic ABS
Optical face	plastic
Mass	70 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
UL approval	cULus
CCC approval	Products with a maximum operating voltage of ≤36 V do not bear a CCC marking because they do not require approval.

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-MLV11-K

dove tail mounting clamp

OMH-RLK29

Mounting bracket

OMH-RLK29-HW

Mounting bracket for rear wall mounting

OMH-RL28-C

Protective cover

OMH-K01

dove tail mounting clamp

OMH-K03

dove tail mounting clamp

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