



Retroreflective sensor RL28-55/82b/110/115

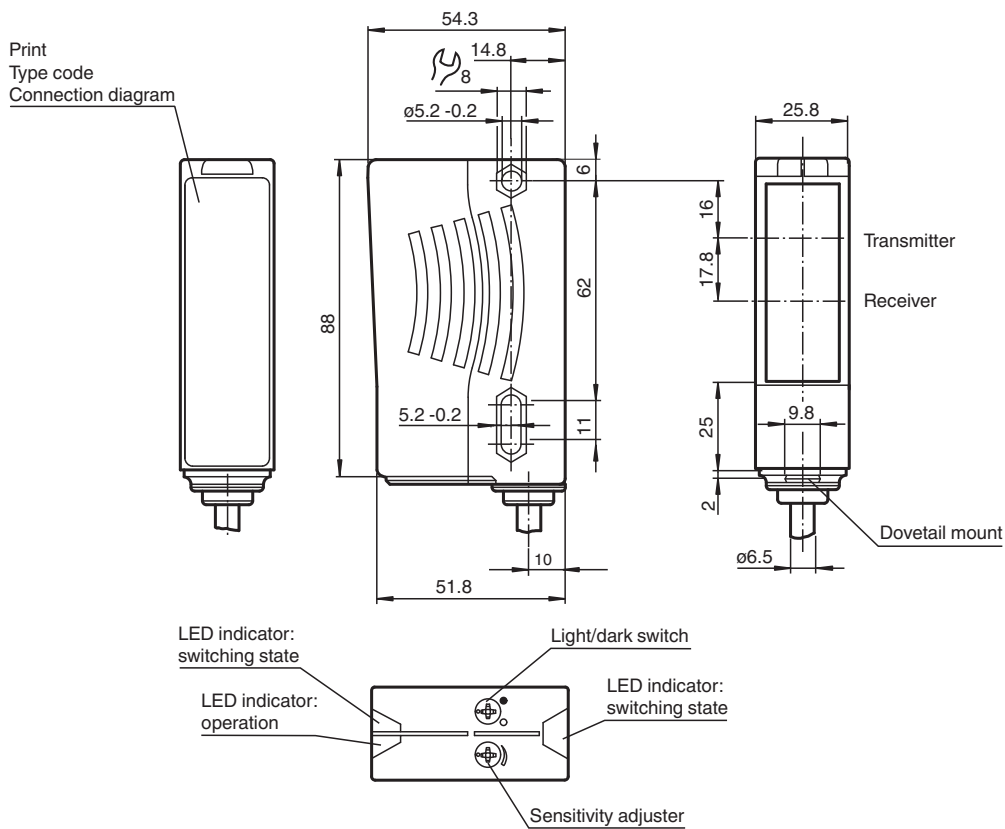


- Ultra bright LEDs for power on, weak signal indication and switching state
- Powerful push-pull output
- Not sensitive to ambient light, even with switched energy saving lamps
- Waterproof, degree of protection IP67
- Protection class II

Retroreflective sensor with polarization filter



Dimensions



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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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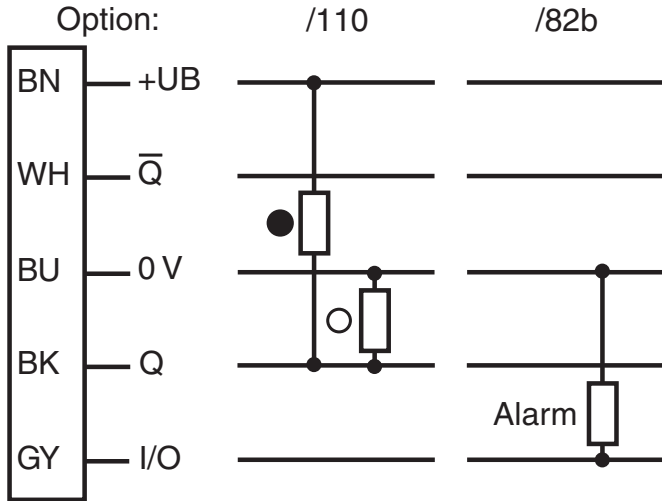
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Technical Data

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
Polarization filter		yes
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 _d		950 a
Mission Time (T _M)		20 a
Diagnostic Coverage (DC)		0 %
Indicators/operating means		
Operation indicator		LED green
Function indicator		2 LEDs yellow, light up when light beam is free, flash when falling short of the stability control, off when light beam is interrupted
Control elements		sensitivity adjustment (Adjustment to < 25% of the effective operating range) , Light-on/dark-on changeover switch
Electrical specifications		
Operating voltage	U _B	10 ... 30 V DC
Ripple		10 %
No-load supply current	I ₀	≤ 40 mA
Output		
Pre-fault indication output		1 PNP, inactive when falling short of the stability control for 10;s immediately inactive if 4 light beam interruptions take place
Switching type		light/dark on switchable
Signal output		1 push-pull (4 in 1) output, short-circuit protected, reverse polarity protected
Switching voltage		max. 30 V DC
Switching current		max. 100 mA
Switching frequency	f	1000 Hz
Response time		0.5 ms
Conformity		
Product standard		EN 60947-5-2
Approvals and certificates		
EAC conformity		TR CU 020/2011
Protection class		II, rated voltage ≤ 250 V AC with pollution degree 1-2 according to IEC 60664-1
UL approval		E87056 , cULus Listed , class 2 power supply , type rating 1
Ambient conditions		
Ambient temperature		-40 ... 60 °C (-40 ... 140 °F)
Storage temperature		-40 ... 75 °C (-40 ... 167 °F)
Mechanical specifications		
Housing width		25.8 mm
Housing height		88 mm
Housing depth		54.3 mm
Degree of protection		IP67
Connection		2500 mm fixed cable
Material		
Housing		Plastic ABS
Optical face		plastic
Mass		70 g

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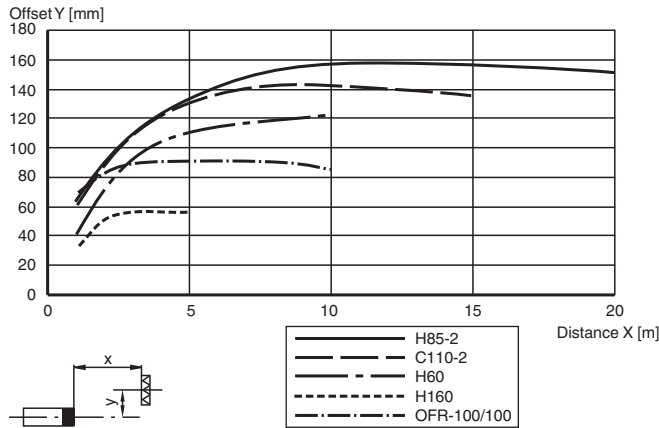
Connection Assignment



○ = Light on
● = Dark on

Characteristic Curve

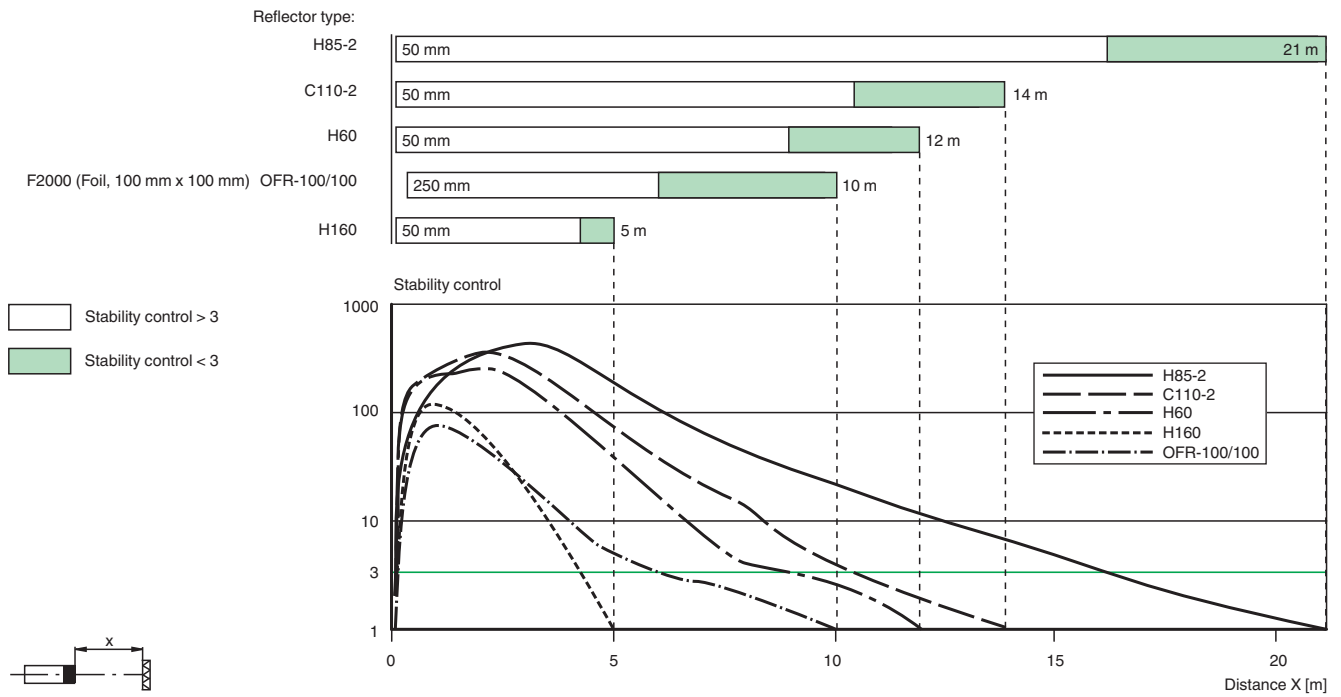
Characteristic response curve



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Relative received light strength



Application



Accessories

	OMH-05	Mounting aid for round steel \varnothing 12 mm or sheet 1.5 mm ... 3 mm
	OMH-21	Mounting bracket: mounting aid for sensors in the RL* series
	OMH-22	Mounting aid for RL* series
	OMH-RLK29-HW	Mounting bracket for rear wall mounting
	OMH-RL28-C	Weld slag cover model

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