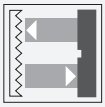


Retroreflective sensor

RL29-55/25/73c/136

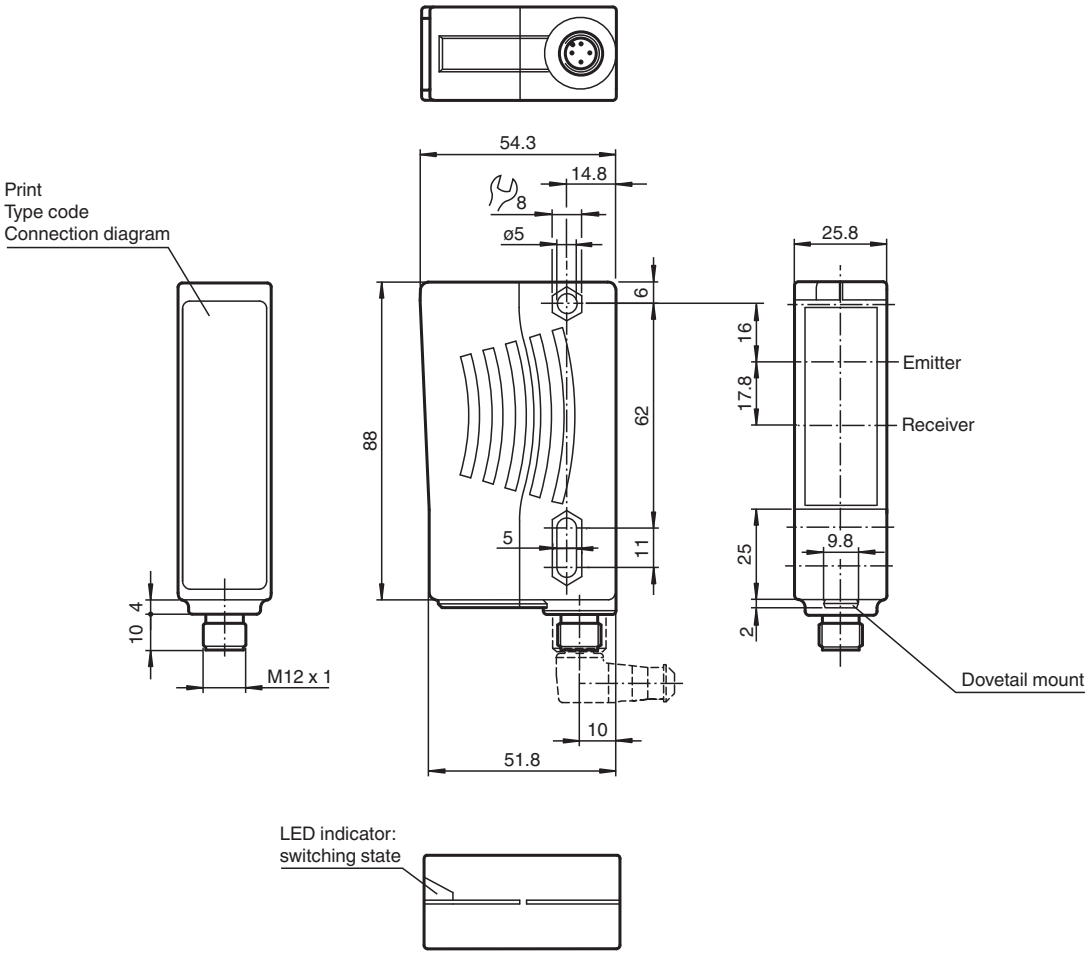


- Highly visible LED
- Powerful push-pull output
- Optimal price/power ratio
- Protection class II

Retroreflective sensor with polarization filter

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Dimensions



Technical Data

General specifications		
Effective detection range		0.1 ... 7 m
Threshold detection range		10 m
Reference target		H85 reflector
Light source		LED, 660 nm
Light type		modulated visible red light
Polarization filter		yes
Diameter of the light spot		approx. 150 mm at a distance of 7 m
Angle of divergence		Emitter: 1.2 ° , Receiver: 2 °
Ambient light limit		80000 Lux
Functional safety related parameters		
$MTTF_d$		1982.2 a
Mission Time (T_M)		20 a
Diagnostic Coverage (DC)		0 %
Indicators/operating means		
Function indicator		LED yellow, light with free light beam , flashes when falling short of the stability control
Electrical specifications		
Operating voltage	U_B	10 ... 30 V DC , class 2
Ripple		10 %
No-load supply current	I_0	≤ 30 mA
Output		
Switching type		light-on

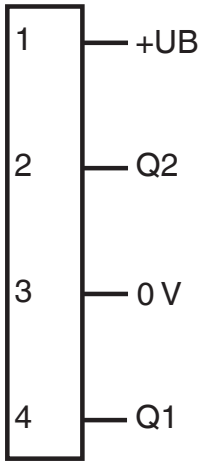
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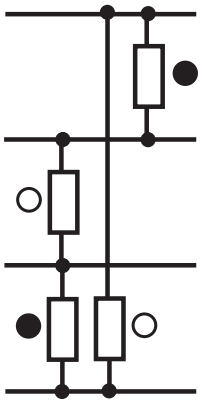
Technical Data

Signal output		2 push-pull (4 in 1) outputs, short-circuit protected, reverse polarity protected
Switching voltage		max. 30 V DC
Switching current		max. 100 mA
Switching frequency	f	500 Hz
Response time		1 ms
Conformity		
Product standard		EN 60947-5-2
Approvals and certificates		
UL approval		cULus Listed, Class 2 Power Source, Type 1 enclosure
CCC approval		CCC approval / marking not required for products rated ≤36 V
Approvals		CE, cULus Listed 57M3 (Only in association with UL Class 2 power supply; Type 1 enclosure)
Ambient conditions		
Ambient temperature		-25 ... 60 °C (-13 ... 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		IP65
Connection		Plastic connector M12 x 1, 4-pin
Material		
Housing		Plastic ABS
Optical face		plastic
Mass		70 g

Connection Assignment

Option:

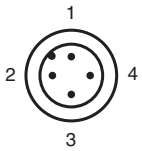




○ = Light on
● = Dark on

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Connection Assignment

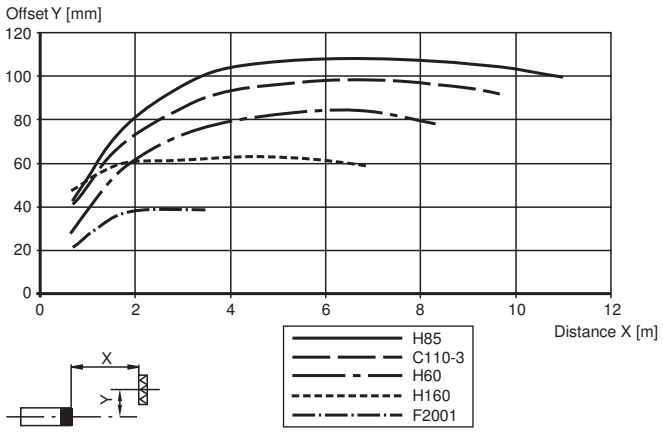


Wire colors in accordance with EN 60947-5-2

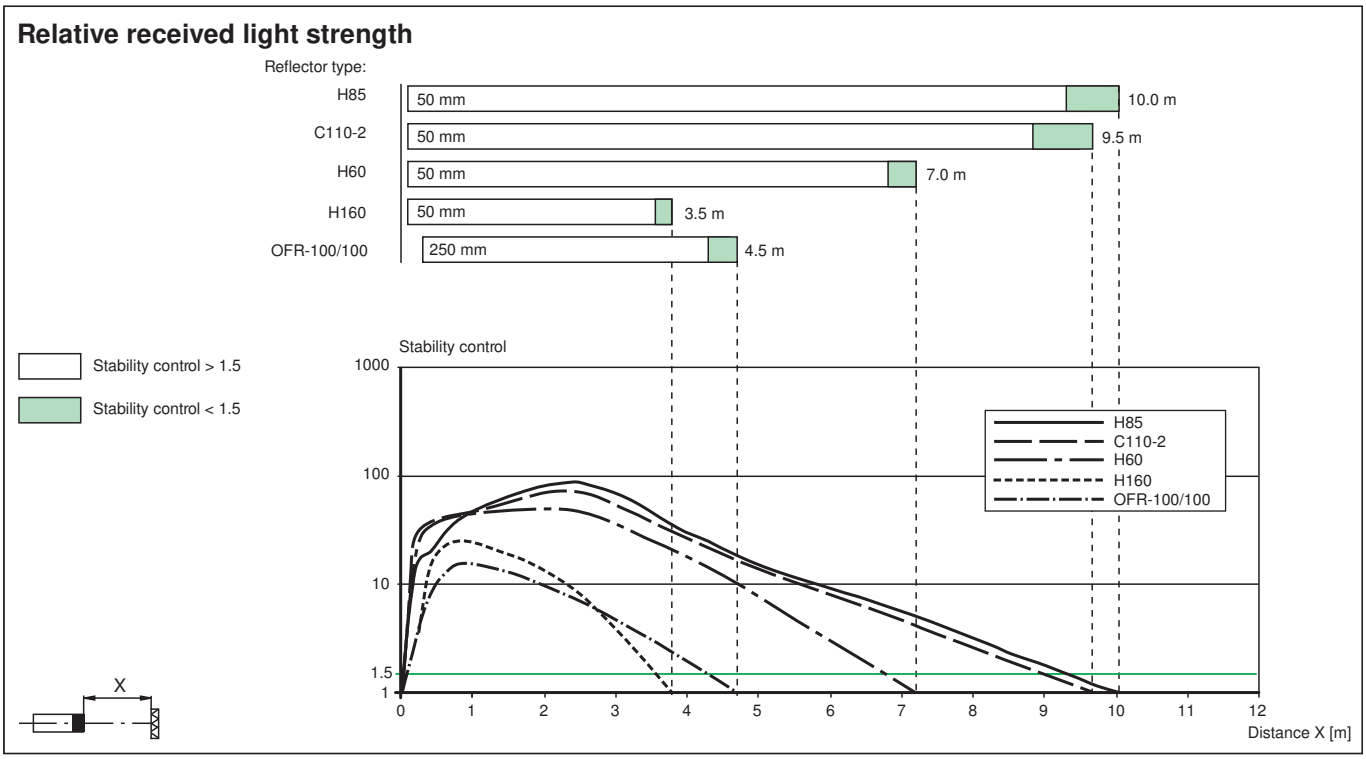
1	BN	(brown)
2	WH	(white)
3	BU	(blue)
4	BK	(black)

Characteristic Curve

Characteristic response curve



Relative received light strength



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Accessories

	**OMH-05**	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-HW**	Mounting bracket for rear wall mounting
	**OMH-RL28-C**	Weld slag cover model
	**V1-G-2M-PUR**	Female cordset, M12, 4-pin, PUR cable
	**V1-W-2M-PUR**	Female cordset, M12, 4-pin, PUR cable

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Components

Suitable reflectors and cable sockets can be found in the Internet

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