



# Retroreflective sensor

## RL29-55/73c/136

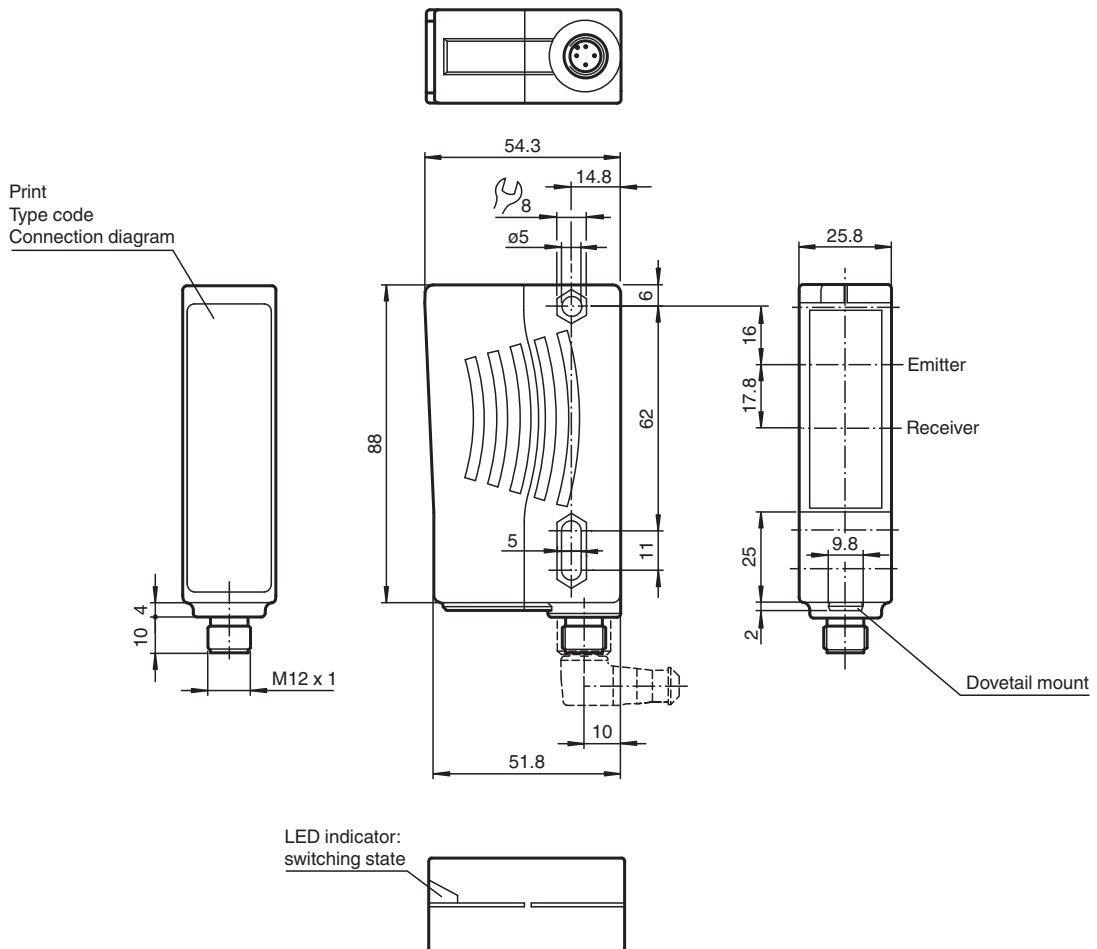


- Highly visible LED
- Powerful push-pull output
- Optimal price/power ratio
- Protection class II

Retroreflective sensor with polarization filter



### Dimensions



### Technical Data

#### General specifications

Effective detection range	0.1 ... 7 m
Threshold detection range	10 m

Release date: 2022-03-30 Date of issue: 2022-03-30 Filename: 801762\_eng.pdf

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

Pepperl+Fuchs Group  
www.pepperl-fuchs.com

USA: +1 330 486 0001  
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 1111  
fa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091  
fa-info@sg.pepperl-fuchs.com

**PF** PEPPERL+FUCHS

## Technical Data

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	
Opening angle	Emitter: 1.2 ° , Receiver: 2 °	
Ambient light limit	80000 Lux	
<b>Functional safety related parameters</b>		
MTTF <sub>d</sub>	1982.2 a	
Mission Time (T <sub>M</sub> )	20 a	
Diagnostic Coverage (DC)	0 %	
<b>Indicators/operating means</b>		
Function indicator	LED yellow, light with free light beam , flashes when falling short of the stability control	
<b>Electrical specifications</b>		
Operating voltage	U <sub>B</sub>	10 ... 30 V DC , class 2
Ripple		10 %
No-load supply current	I <sub>0</sub>	≤ 30 mA
<b>Output</b>		
Switching type	dark-on	
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	
<b>Conformity</b>		
Product standard	EN 60947-5-2	
<b>Approvals and certificates</b>		
EAC conformity	TR CU 020/2011	
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)	
<b>Ambient conditions</b>		
Ambient temperature	-25 ... 60 °C (-13 ... 140 °F)	
Storage temperature	-40 ... 75 °C (-40 ... 167 °F)	
<b>Mechanical specifications</b>		
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	
<b>Material</b>		
Housing	Plastic ABS	
Optical face	plastic	
Mass	70 g	

Release date: 2022-03-30 Date of issue: 2022-03-30 Filename: 801762\_eng.pdf

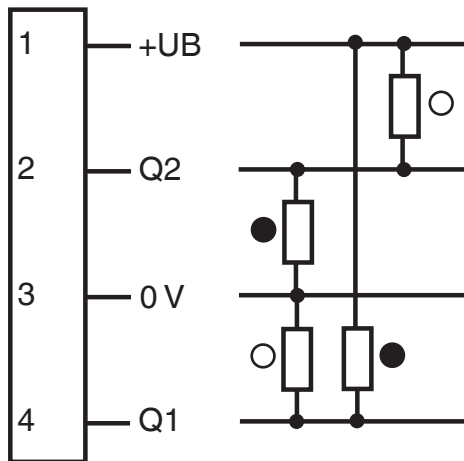
Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

Pepperl+Fuchs Group  
www.pepperl-fuchs.comUSA: +1 330 486 0001  
fa-info@us.pepperl-fuchs.comGermany: +49 621 776 1111  
fa-info@de.pepperl-fuchs.comSingapore: +65 6779 9091  
fa-info@sg.pepperl-fuchs.com

**PEPPERL+FUCHS**

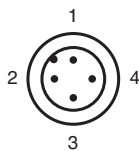
## Connection Assignment

Option:



○ = Light on  
● = Dark on

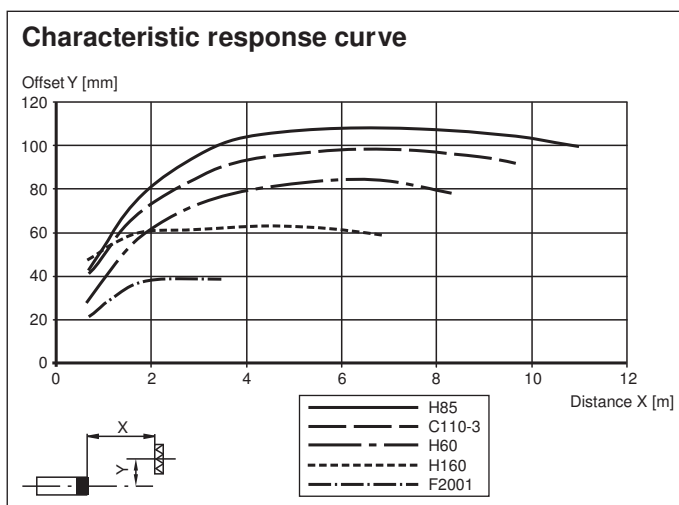
## Connection Assignment



Wire colors in accordance with EN 60947-5-2

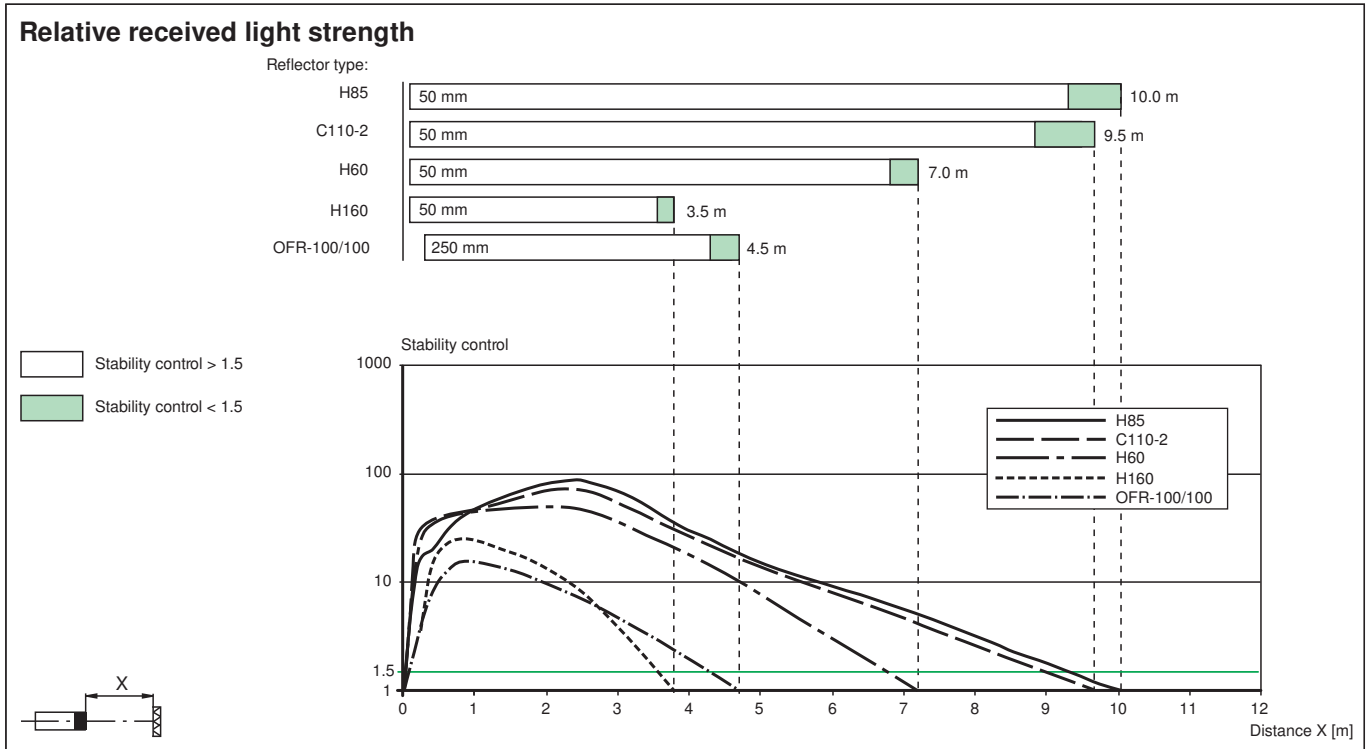
1	BN	(brown)
2	WH	(white)
3	BU	(blue)
4	BK	(black)

## Characteristic Curve



Release date: 2022-03-30 Date of issue: 2022-03-30 Filename: 801762\_eng.pdf

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



## Accessories

	<b>OMH-05</b>	Mounting aid for round steel $\varnothing$ 12 mm or sheet 1.5 mm ... 3 mm
	<b>OMH-21</b>	Mounting bracket: mounting aid for sensors in the RL* series
	<b>OMH-22</b>	Mounting aid for RL* series
	<b>OMH-RLK29-HW</b>	Mounting bracket for rear wall mounting
	<b>OMH-RL28-C</b>	Weld slag cover model
	<b>V1-G-2M-PUR</b>	Female cordset single-ended M12 straight A-coded, 4-pin, PUR cable grey
	<b>V1-W-2M-PUR</b>	Female cordset single-ended M12 angled A-coded, 4-pin, PUR cable grey

Release date: 2022-03-30 Date of issue: 2022-03-30 Filename: 801762\_eng.pdf