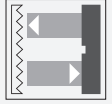




## Retroreflective sensor

RLK29-55/59/116



- Robust, compact photoelectric sensor for single-beam gate protection
- Not sensitive to ambient light, even with energy saving lamps
- Tamper-proof, no operating controls
- Version for universal voltages
- Relay output

Robust, compact, long range photoelectric sensors for detecting people, objects and vehicles



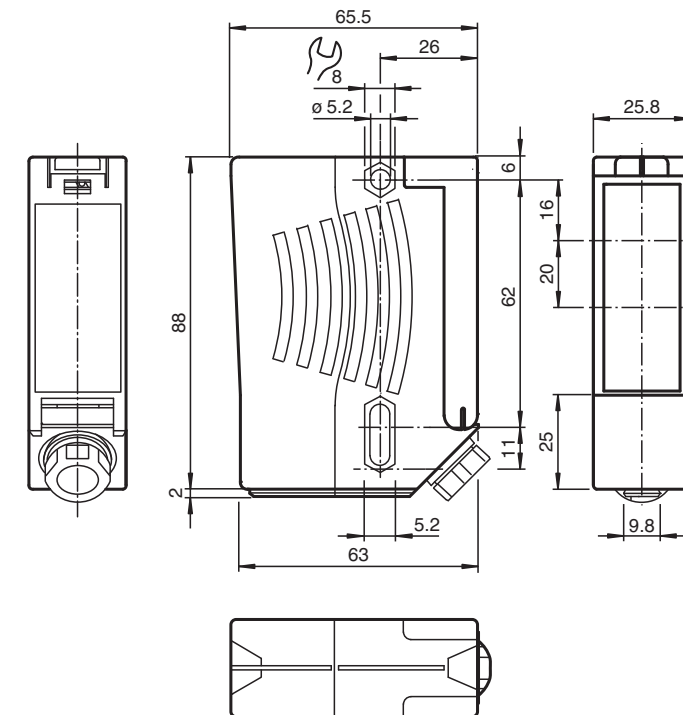
### Function

Series 29 is a range of low-cost and, most importantly, reliable photoelectric sensors for monitoring industrial doors, elevators, and automatic gates. Their high degree of protection makes them the ideal solution for tasks outdoors and at thresholds, and in harsh environments. These "universal-voltage sensors" can be operated with any supply voltage from 24 V to 240 V, and with direct current or alternating current.

### Application

- Monitoring closing edges of automatic industrial doors and elevators
- Monitoring the swing range of automatic gates
- Detecting and tracking objects in material handling

## Dimensions



## Technical Data

### General specifications

Effective detection range	0 ... 12 m
Reflector distance	0.04 ... 12 m
Threshold detection range	14 m
Reference target	H85-2 reflector
Light source	LED
Light type	modulated visible red light , 640 nm
Diameter of the light spot	approx. 35 mm at a distance of 12 m
Opening angle	$\pm 1^\circ$
Ambient light limit	90000 Lux

### Functional safety related parameters

MTTF <sub>d</sub>	1460 a
Mission Time (T <sub>M</sub> )	20 a
Diagnostic Coverage (DC)	0 %

### Indicators/operating means

Function indicator	LED red illuminates: when beam is free flashes: when level falls below function reserve off: when beam is interrupted
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### Electrical specifications

Operating voltage	U <sub>B</sub>	24 ... 230 V AC/DC
Ripple		10 %
No-load supply current	I <sub>0</sub>	≤ 8.5 mA

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

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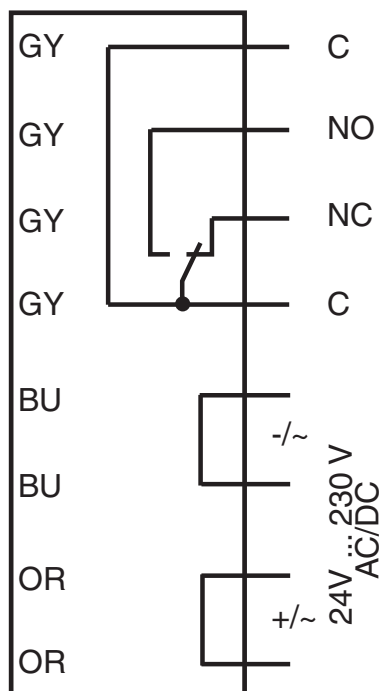
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## Technical Data

Power consumption	P <sub>0</sub>	0.2 W at 24 V DC , 1.8 W at 230 V AC 3 VA
<b>Output</b>		
Switching type		dark-on
Signal output		Relay, 1 alternator
Switching voltage		230 V AC
Switching current		max. 2 A
Switching frequency	f	7 Hz
Response time		50 ms
<b>Conformity</b>		
Product standard		EN 60947-5-2
<b>Approvals and certificates</b>		
CE conformity		yes
UL approval		cULus Listed <b>Caution:</b> This equipment is considered as open-type equipment. It must be mounted within an enclosure, that is suitably designed for protection against internal fire and personal injury resulting from accessibility to live parts according UL 508.
CCC approval		Certified by China Compulsory Certification (CCC)
<b>Ambient conditions</b>		
Ambient temperature		-20 ... 60 °C (-4 ... 140 °F)
Storage temperature		-20 ... 60 °C (-4 ... 140 °F)
<b>Mechanical specifications</b>		
Degree of protection		IP67
Connection		terminal compartment
Material		
Housing		Plastic ABS, flame resistant
Optical face		Plastic pane
Mass		100.7 g
Note		Safety fuse ≤ 2 A (slow-blow) according to IEC 60127-2 Sheet 1 Recommendation: after a short circuit, check that the device is functioning correctly.

## Connection Assignment



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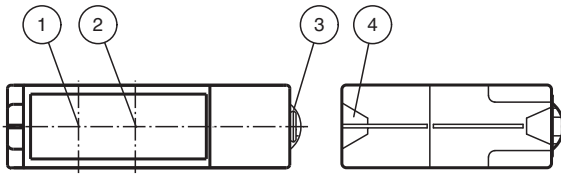
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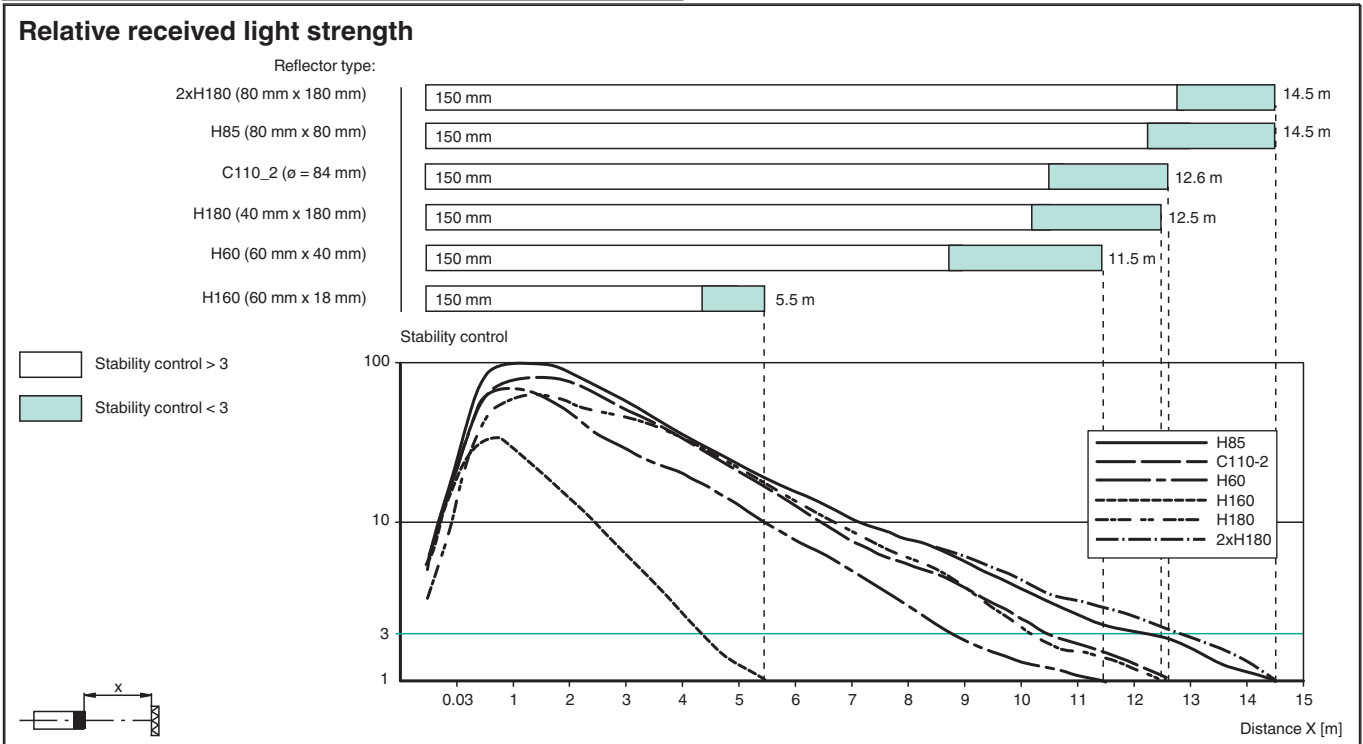
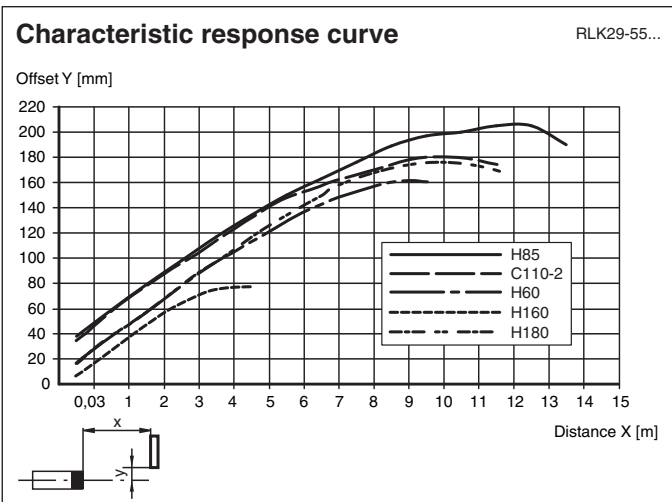
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**Assembly**













1	Emitter
2	Receiver
3	Dovetail mount
4	Functional display
	red

**Characteristic Curve**



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## Accessories

	<b>OMH-RLK29</b>	Mounting bracket
	<b>OMH-RLK29-HW</b>	Mounting bracket for rear wall mounting
	<b>OMH-RLK29-HW-120</b>	Mounting bracket for rear wall mounting
	<b>OMH-21</b>	Mounting bracket: mounting aid for sensors in the RL* series
	<b>OFR-100/100</b>	Reflective tape 100 mm x 100 mm
	<b>REF-C110-2</b>	Reflector, round ø 84 mm, central mounting hole
	<b>REF-H180</b>	Reflector, rectangular 182 mm x 42 mm, mounting holes
	<b>REF-H160</b>	Reflector, rectangular 60 mm x 18 mm, mounting holes
	<b>REF-H85-2</b>	Reflector, rectangular 84.5 mm x 84.5 mm, mounting holes
	<b>REF-H60-2</b>	Reflector with mounting holes
	<b>REF-H50</b>	Reflector, rectangular 51 mm x 61 mm, mounting holes, fixing strap