



Retroreflective sensor

RLK29-55/25/116



- 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



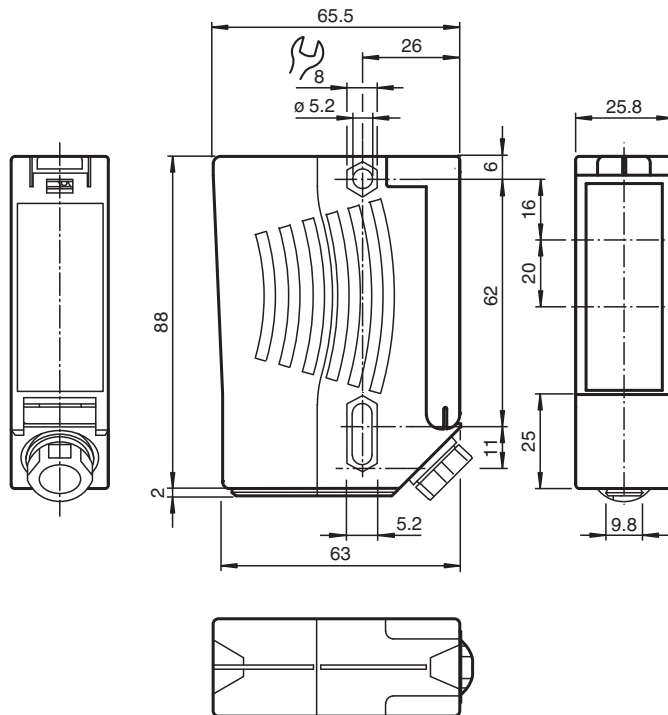
Function

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 _d	1460 a
Mission Time (T _M)	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 _B	24 ... 230 V AC/DC
Ripple		10 %
No-load supply current	I ₀	≤ 8.5 mA
Power consumption	P ₀	0.2 W at 24 V DC , 1.8 W at 230 V AC 3 VA

Output

Switching type	light-on	
Signal output	Relay, 1 alternator	
Switching voltage	230 V AC	
Switching current	max. 2 A	
Switching frequency	f	7 Hz

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

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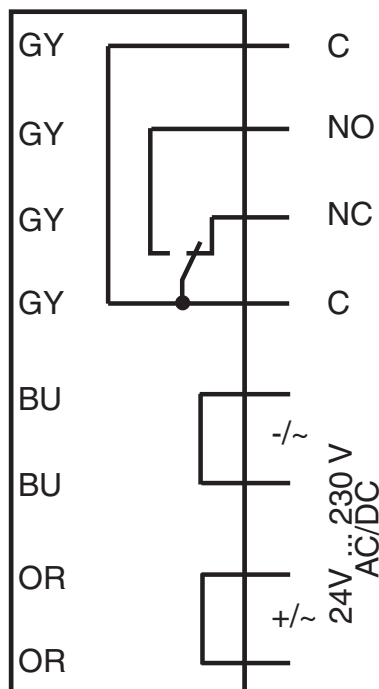
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Technical Data

Response time	50 ms
Conformity	
Product standard	EN 60947-5-2
Approvals and certificates	
CE conformity	yes
UL approval	cULus Listed Caution: 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)
Ambient conditions	
Ambient temperature	-20 ... 60 °C (-4 ... 140 °F)
Storage temperature	-20 ... 60 °C (-4 ... 140 °F)
Mechanical specifications	
Degree of protection	IP67
Connection	terminal compartment
Material	
Housing	plastic
Optical face	Plastic pane
Mass	100.7 g
Dimensions	
Height	88 mm
Width	25.8 mm
Depth	65.5 mm
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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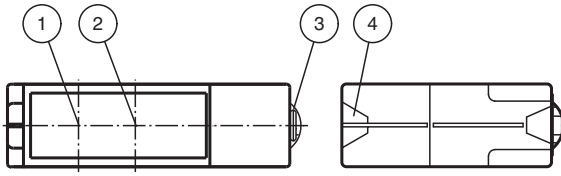
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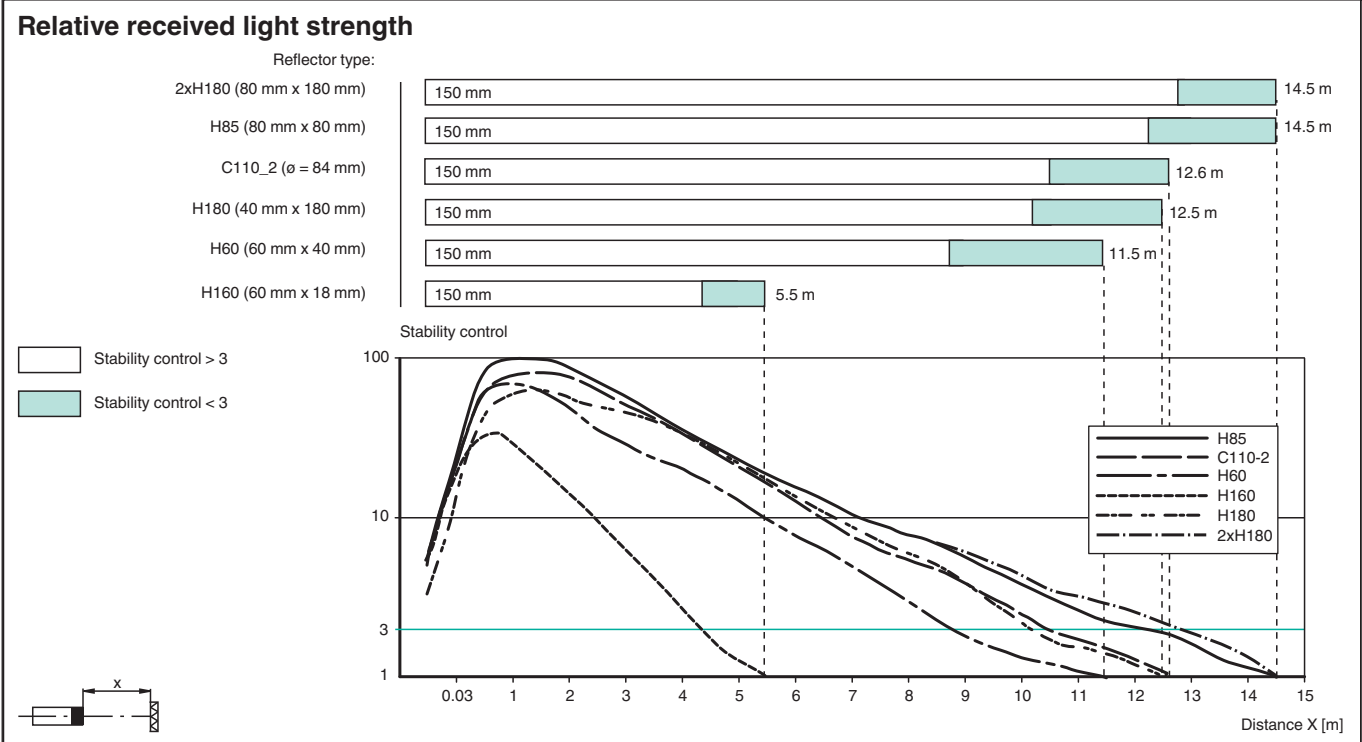
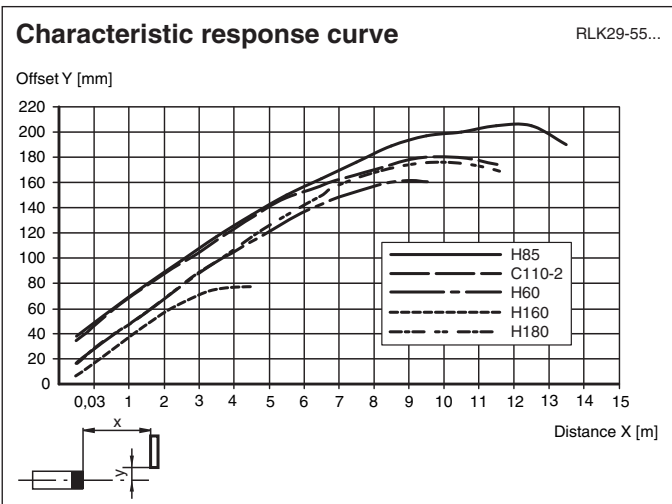
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Assembly



1	Emitter
2	Receiver
3	Dovetail mount
4	Functional display
	red

Characteristic Curve



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