

# Retroreflective sensor

## RL39-55/32/35/40a/82a/116

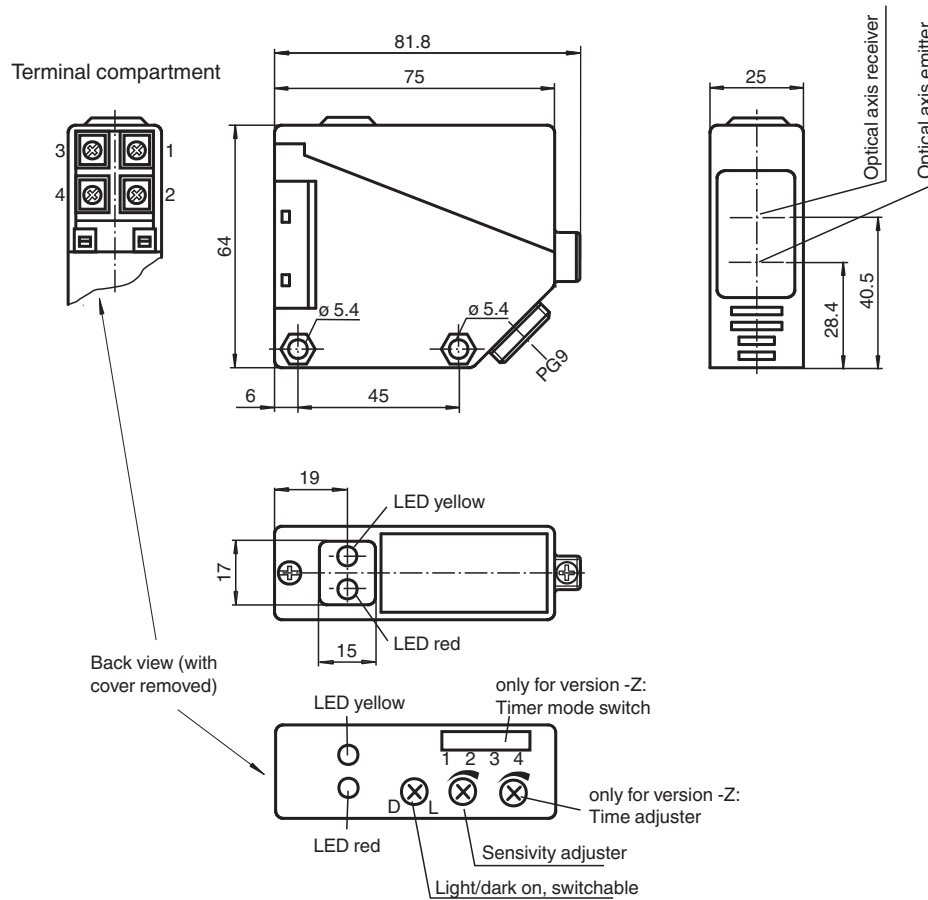


- Visible red light
- Light-on/dark-on, switchable
- Degree of protection IP67

Retroreflective sensor without polarization filter



### Dimensions



Release date: 2022-08-08 Date of issue: 2022-08-08 Filename: 088813\_eng.pdf

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

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## Technical Data

General specifications			
Effective detection range			0 ... 17 m
Reflector distance			0.1 ... 17 m
Threshold detection range			20 m
Reference target			H50 reflector
Light source			LED red
Light type			modulated visible red light
Polarization filter			no
Ambient light limit			IEC / EN 60947-5-2 , 10000 Lux
Functional safety related parameters			
MTTF <sub>d</sub>			800 a
Mission Time (T <sub>M</sub> )			20 a
Diagnostic Coverage (DC)			0 %
Indicators/operating means			
Function indicator			LED yellow: switching state LED red: pre-fault indication
Control elements			Sensing range adjuster, light-on/dark-on changeover switch
Electrical specifications			
Operating voltage	U <sub>B</sub>		10 ... 30 V DC
Ripple			10 %
No-load supply current	I <sub>0</sub>		≤ 20 mA
Time delay before availability	t <sub>v</sub>		≤ 300 ms
Output			
Pre-fault indication output			1 PNP, active when falling short of the stability control
Switching type			light/dark on
Signal output			1 PNP output, short-circuit protected, reverse polarity protected, open collector
Switching voltage			max. 30 V DC
Switching current			max. 200 mA , resistive load
Voltage drop	U <sub>d</sub>		≤ 3 V
Switching frequency	f		≤ 300 Hz
Response time			≤ 1.5 ms
Conformity			
Product standard			EN 60947-5-2
Approvals and certificates			
EAC conformity			TR CU 020/2011
CCC approval			CCC approval / marking not required for products rated ≤36 V
Approvals			CE
Ambient conditions			
Ambient temperature			-25 ... 55 °C (-13 ... 131 °F)
Storage temperature			-40 ... 70 °C (-40 ... 158 °F)
Mechanical specifications			
Housing width			25 mm
Housing height			64 mm
Housing depth			75 mm
Degree of protection			IP67
Connection			terminal compartment PG9, ≤ 2.5 mm <sup>2</sup>
Material			
Housing			PBT
Optical face			PMMA
Mass			approx. 100 g
General information			
Scope of delivery			Mounting aid , Reflector

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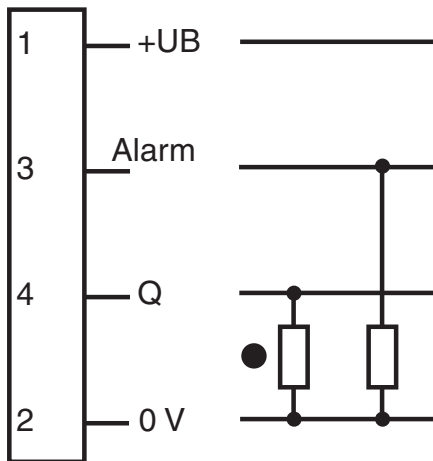
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**Connection Assignment**

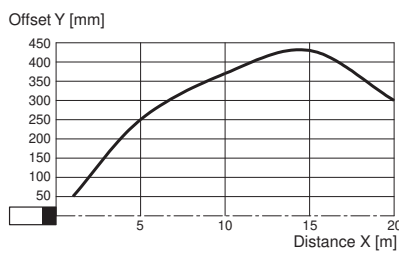
Option: 32/40a/82a/116



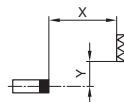
- = Light on
- = Dark on

**Characteristic Curve**

**Characteristic response curve**



Permissible distance (offset) between optical axis and retro-reflector.



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