

# Retroreflective sensor

## RL39-54/30/40a/116/126a

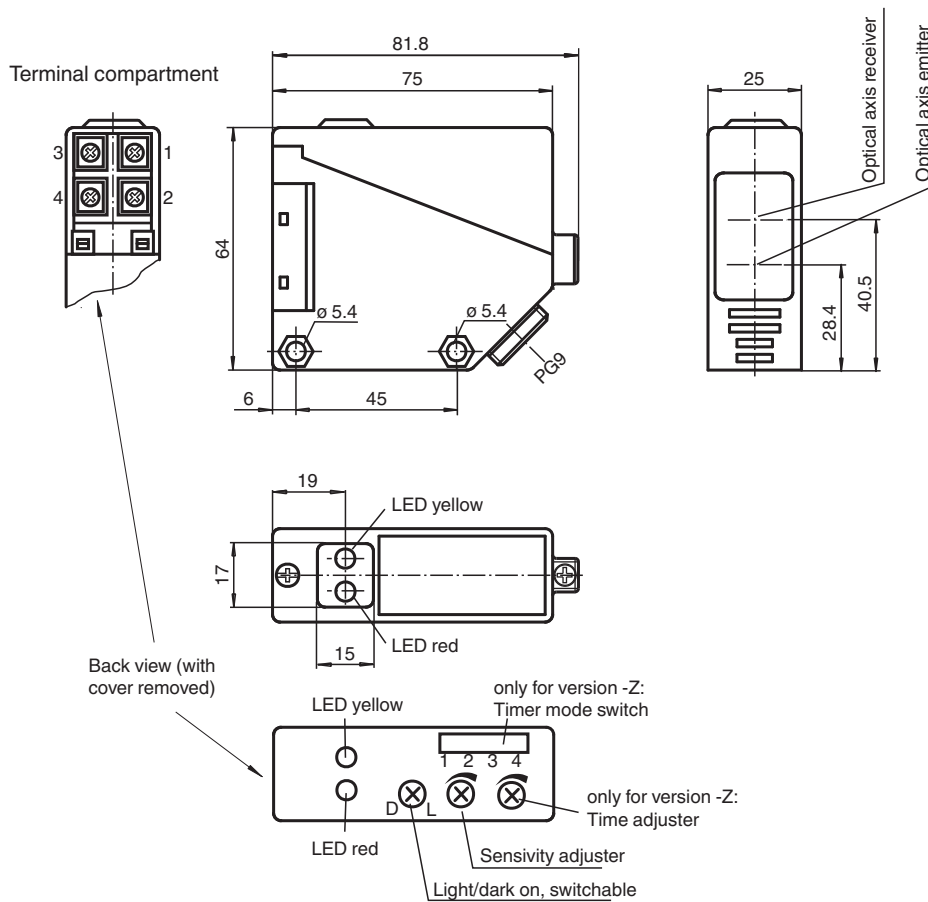


- Glare protected with polarization filter
- Visible red light
- Light-on/dark-on, switchable
- Degree of protection IP67

Retroreflective sensor for standard applications, polarization filter, detection range 12 m, red light, sensitivity adjuster, light/dark on, prefault output, NPN output, terminal compartment



### Dimensions



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

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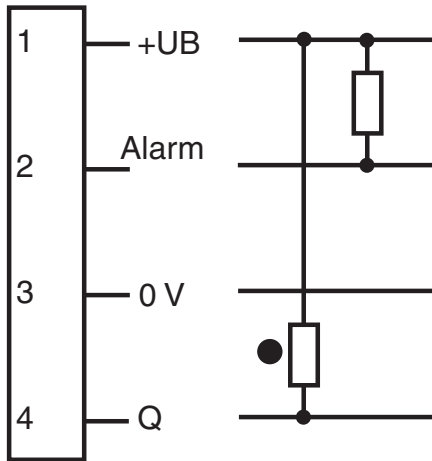
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## Technical Data

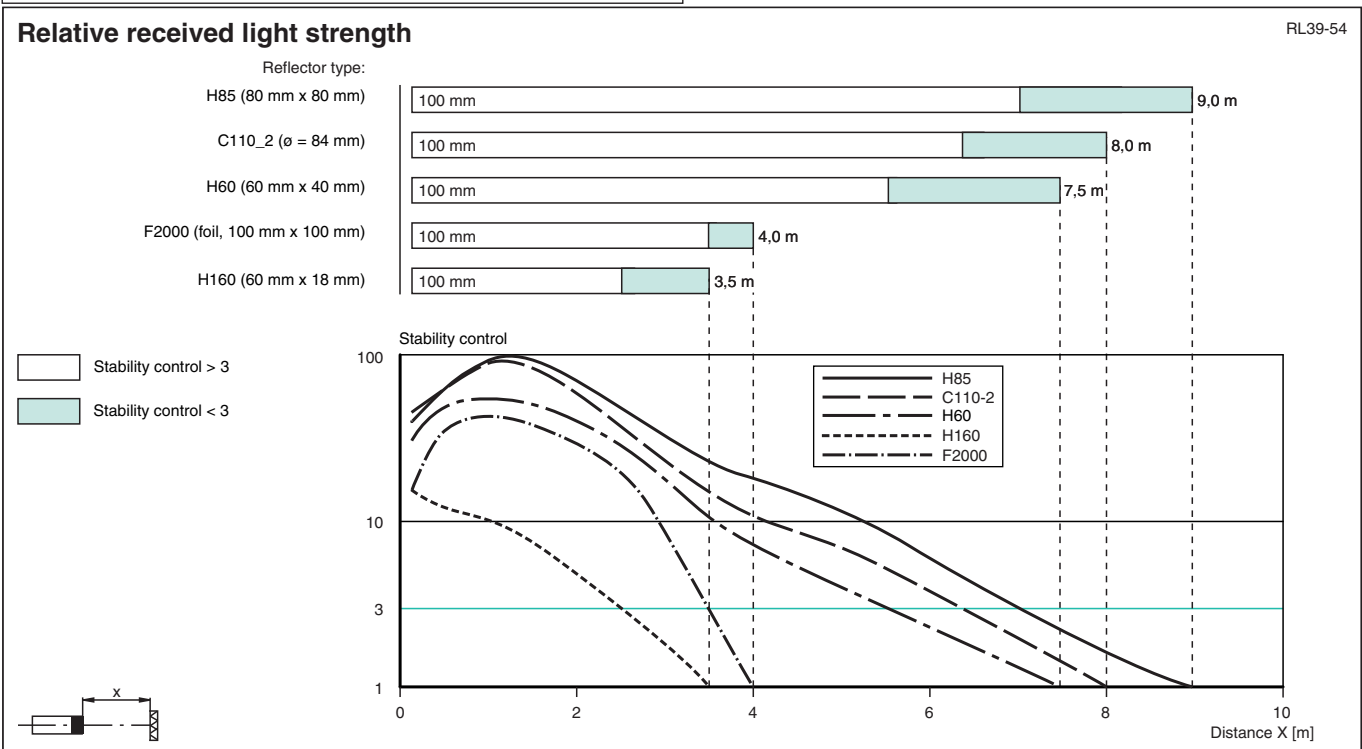
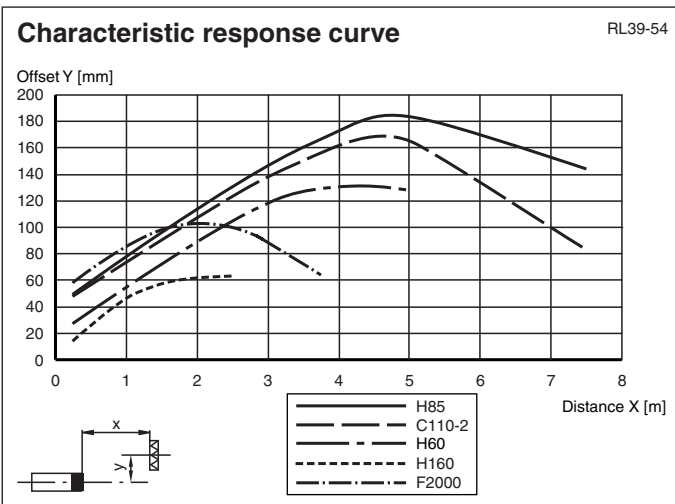
General specifications		
Effective detection range		0 ... 5 m
Reflector distance		0.1 ... 5 m
Threshold detection range		6 m
Reference target		H50 reflector
Light source		LED red
Light type		modulated visible red light
Polarization filter		yes
Ambient light limit		IEC / EN 60947-5-2 , 10000 Lux
Functional 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		
Stability alarm output		1 NPN, active when falling short of the stability control
Switching type		light/dark on
Signal output		1 NPN 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		
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

**Connection Assignment**

Option:



**Characteristic Curve**



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