



Model Number

LA39/LK39-Z/31/40a/116

Thru-beam sensor
with terminal compartment

Features

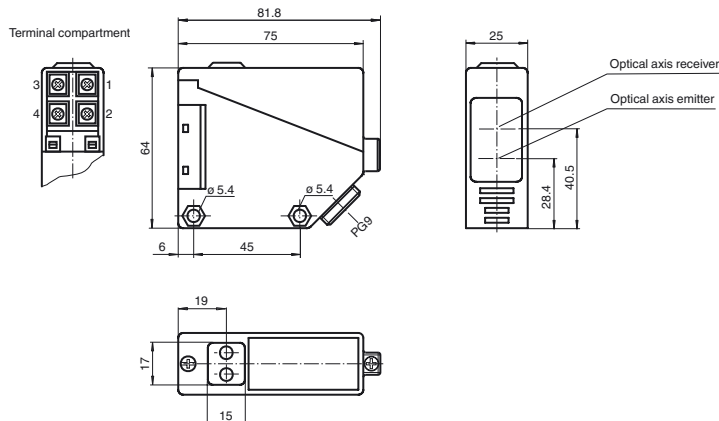
- Light/dark ON, switchable
- Timer function
- Supplied with mounting accessory
- Protection degree IP67

Product information

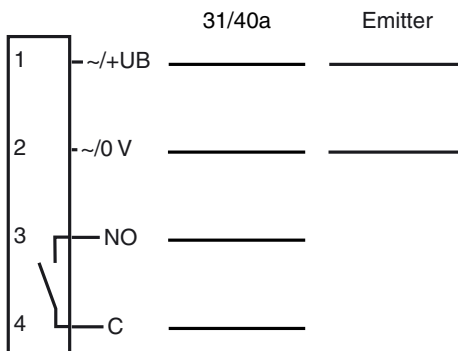
Series 39 sensors are characterized by their high performance level, compact housing design, and variety of available versions. These include thru-beam sensors with a 20 m detection range, retroreflective sensors with polarization filter for a 5 m detection range, energetic diffuse mode sensors with an 800 mm and 2000 mm detection range, and a background suppression sensor with 500 mm detection range. Fitted in a robust plastic housing, this series is ideal for tough industrial applications.

The sensors are supplied with 10 V to 30 V DC, or 24 V to 240 V AC/DC. Various transistor and relay outputs are available as signal outputs. Standard features include pre-fault diagnostics and pre-fault output. The switching element function can be changed using the light/dark switch.

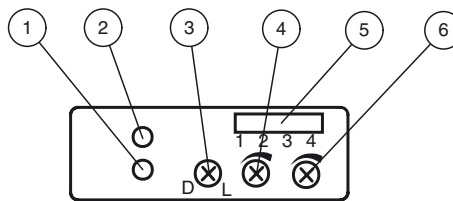
Dimensions



Electrical connection



Indicators/operating means



1	Operating display red (Transmitter)
1	Pre-fault indication red (Receiver)
2	Switch state yellow
3	Light/dark on switch
4	Sensitivity adjustment
5	Timer mode switch (version -Z)
6	Time adjuster (version -Z)

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Technical data**General specifications**

Effective detection range	0 ... 20 m
Threshold detection range	30 m
Adjustment range	800 ... 30000 mm
Reference target	receiver
Light source	IRED
Light type	modulated infrared light
Approvals	CE
Ambient light limit	10000 Lux

Indicators/operating means

Operating display	LED red (emitter)
Function display	LED yellow: switching state (receiver) LED red: pre-fault indicator, flashing (receiver)
Controls	sensitivity adjustment
Controls	Light/Dark switch (receiver)
Controls	switch for timer function

Electrical specifications

Operating voltage	U_B	12 ... 240 V DC / 24 ... 240 V AC (50 ... 60 Hz)
Ripple		10 %
No-load supply current	I_0	≤ 55 mA (device)
Power consumption	P_0	≤ 3 VA
Time delay before availability	t_v	≤ 50 ms

Output

Switching type	light/dark on	
Signal output	1 relay output	
Switching voltage	≤ 240 V AC	
Switching current	max. 3 A	
Switching frequency	f	≤ 25 Hz
Response time		≤ 20 ms
Timer function		On-/off-delay or pulse extension on choice

Standard conformity

Standards	EN 60947-5-2
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Ambient conditions

Ambient temperature	-25 ... 55 °C (-13 ... 131 °F)
Storage temperature	-40 ... 70 °C (-40 ... 158 °F)

Mechanical specifications

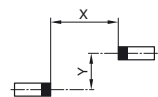
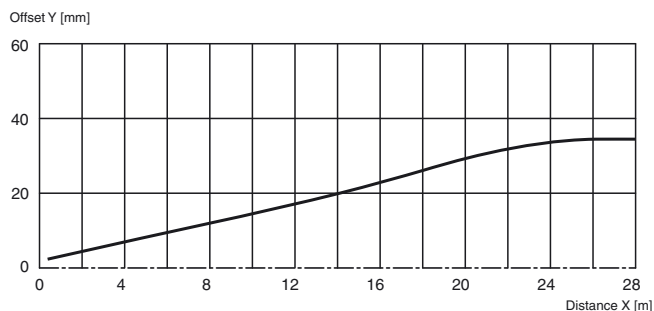
Protection degree	IP67
Connection	terminal compartment PG9, ≤ 2.5 mm ²
Material	
Housing	PBT
Optical face	PMMA
Mass	emitter: 90 g receiver: 100 g

Compliance with standards and directives

Directive conformity	
EMC Directive 2004/108/EC	EN 60947-5-2

Approvals and certificates

CCC approval	Certified by China Compulsory Certification (CCC)
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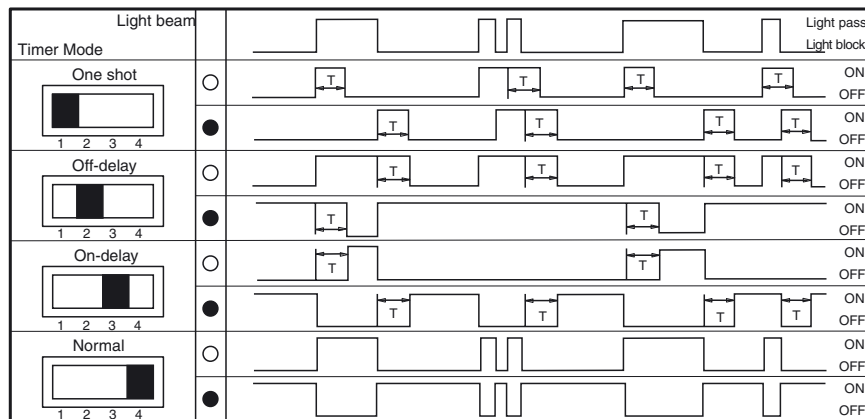
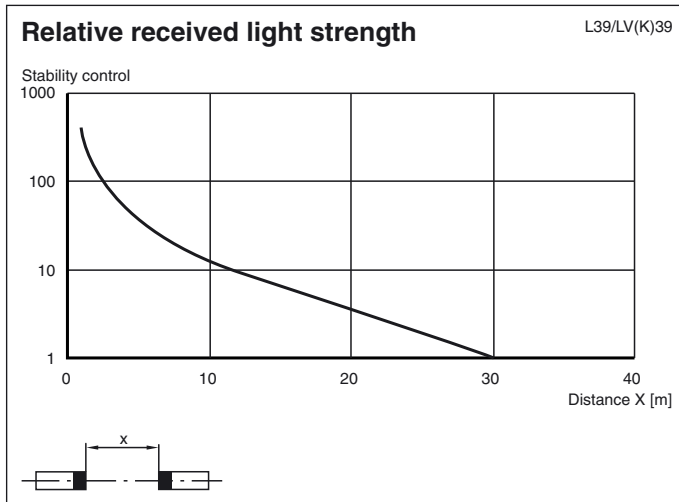
Curves/Diagrams**Characteristic response curve**

Permissible distance (offset) between the optical axis of the emitter and receiver.

Accessories**OMH-RL39**

Mounting bracket for RL39 series Sensors

Other suitable accessories can be found at www.pepperl-fuchs.com



○ Denotes Light - ON T= 0.1 10 sec.
 ● Denotes Dark - ON

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