







## **Model Number**

#### LA39/LK39/31/40a/116

Thru-beam sensor with terminal compartment

### **Features**

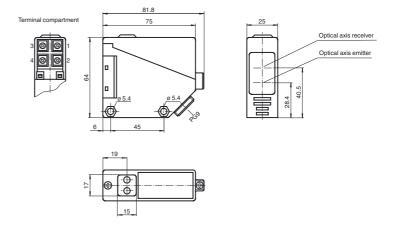
- Light/dark ON, switchable
- Supplied with mounting accessory
- Degree of protection IP67

## **Product information**

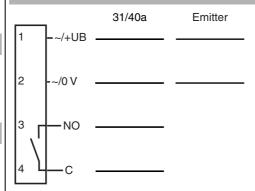
Series 39 sensors are characterized by their high performance level, compact housing design, and variety of available versions. These include thru-beam sensors with a 20 m detection range, retroreflective sensors with polarization filter for a 5 m detection range, energetic diffuse mode sensors with 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 prefault diagnostics and pre-fault output. The switching element function can be changed using the light/dark switch.

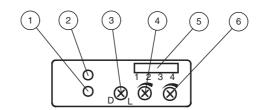
### **Dimensions**



## **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
- Sensitivity adjustment
- Timer mode switch (version -Z)
- Time adjuster (version -Z)

#### **Technical data** System components Emitter LA39/116 LK39/31/40a/116 General specifications Effective detection range 0 20 m Threshold detection range 800 ... 30000 mm Adjustment range Reference target receiver Light source IRED Light type modulated infrared light Ambient light limit 10000 Lux Functional safety related parameters $\mathsf{MTTF}_\mathsf{d}$ 916 a Mission Time $(T_M)$ 20 a Diagnostic Coverage (DC) 0 % Indicators/operating means Operation indicator LED red (emitter) LED yellow: switching state (receiver) Function indicator LED red: pre-fault indicator, flashing (receiver) Control elements sensitivity adjustment Light/Dark switch (receiver) Control elements **Electrical specifications** Operating voltage 12 ... 240 V DC / 24 ... 240 V AC (50 ... 60 Hz) $U_{\mathsf{B}}$ Ripple 10 % No-load supply current ≤ 55 mA (device) $I_0$ Power consumption $P_0$ $\leq$ 3 VA Time delay before availability ≤ 50 ms Output Switching type light/dark on 1 relay output Signal output Switching voltage ≤ 240 V AC Switching current max. 3 A Switching frequency ≤ 25 Hz Response time ≤ 20 ms **Ambient conditions** -25 ... 55 °C (-13 ... 131 °F) Ambient temperature -40 ... 70 °C (-40 ... 158 °F) Storage temperature **Mechanical specifications** Degree of protection terminal compartment PG9, ≤ 2.5 mm<sup>2</sup> Connection Material Housing PBT **PMMA** Optical face emitter: 90 g receiver: 100 g Mass **General information** Scope of delivery Mounting aid Compliance with standards and directives EMC Directive 2004/108/EC Directive conformity Standard conformity Product standard EN 60947-5-2:2007 IEC 60947-5-2:2007 Approvals and certificates

## **Accessories**

#### OMH-RL39

Mounting bracket for RL39 series Sen-

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

PEPPERL+FUCHS

CCC approval

Approvals

Certified by China Compulsory Certification (CCC)

# **Curves/Diagrams**

