



Part no.: 50134457
LE49C/4W-TB
Throughbeam photoelectric sensor receiver



Figure can vary

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Technical data

Basic data	
Series	49C
Operating principle	Throughbeam principle
Device type	Receiver
Special design	
Special design	Warning output
Optical data	
Operating range	Guaranteed operating range
Operating range	0.5 ... 120 m
Operating range limit	Typical operating range
Operating range limit	0 ... 150 m
Electrical data	
Protective circuit	Polarity reversal protection Short circuit protected Transient protection
Performance data	
Supply voltage U_B	10 ... 30 V , DC , Incl. residual ripple
Residual ripple	0 ... 15 % , From U_B
Open-circuit current	0 ... 20 mA
Outputs	
Number of digital switching outputs	2 Piece(s)
Switching outputs	
Voltage type	DC
Switching current, max.	100 mA
Switching voltage	High: $\geq(U_B-2V)$ Low: $\leq 2V$
Switching output 1	
Assignment	Connection 1, pin 3
Switching element	Transistor , PNP
Switching principle	Light switching
Switching output 2	
Assignment	Connection 1, pin 4
Switching element	Transistor , PNP
Switching principle	U_B switching
Timing	
Switching frequency	500 Hz
Response time	1 ms
Readiness delay	300 ms
Connection	

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Connection 1

Function	Signal OUT Voltage supply
Type of connection	Terminal
Type of terminal	Spring-cage terminal
No. of pins	5 -pin

Mechanical data

Dimension (W x H x L)	31 mm x 104 mm x 55.5 mm
Housing material	Plastic , PC
Lens cover material	Plastic
Net weight	150 g
Housing color	Red
Type of fastening	Through-hole mounting Via optional mounting device

Operation and display

Type of display	LED
Number of LEDs	3 Piece(s)

Environmental data

Ambient temperature, operation	-40 ... 60 °C
Ambient temperature, storage	-40 ... 70 °C

Certifications

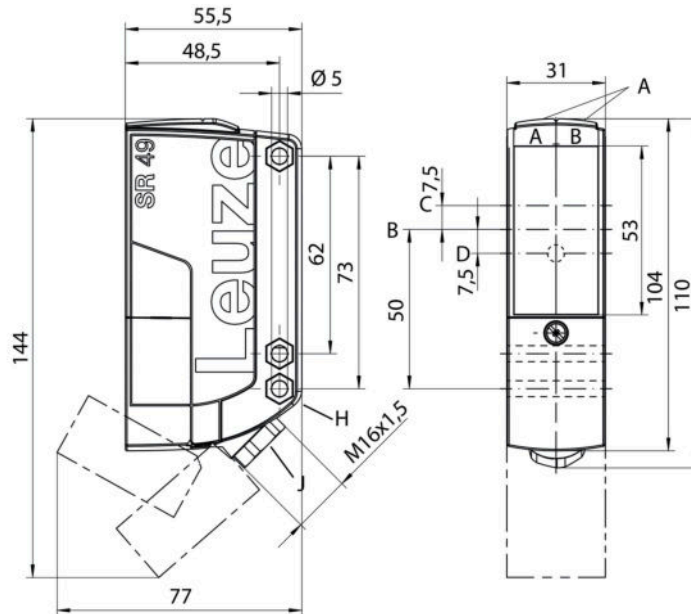
Degree of protection	IP 67
Protection class	II
Certifications	c UL US
Standards applied	IEC 60947-5-2

Classification

Customs tariff number	85365019
eCl@ss 8.0	27270901
eCl@ss 9.0	27270901
ETIM 5.0	EC002716
ETIM 6.0	EC002716

Dimensioned drawings

All dimensions in millimeters



- AA Green LED
- AB Yellow LED
- B Optical axis
- C Receiver
- D Yellow LED
- G Countersinking for SK nut M5, 4.2 mm deep
- J Cable entry with M16 x 1.5 screw fitting for $\varnothing 5 \dots 10$ mm

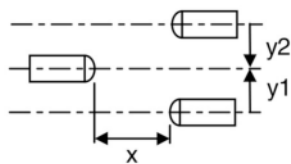
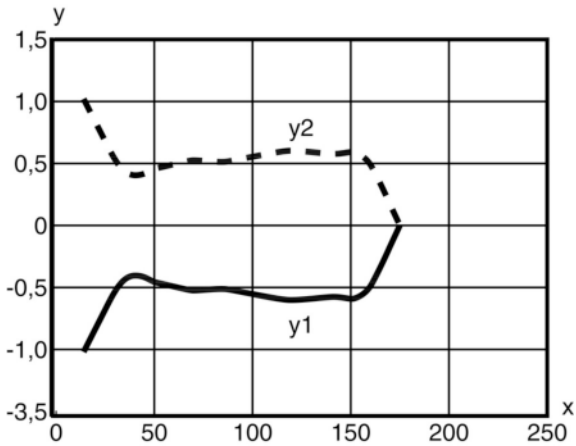
Electrical connection

Connection 1	
Function	Signal OUT Voltage supply
Type of connection	Terminal
Type of terminal	Spring-cage terminal
No. of pins	5 -pin

Terminal	Assignment
1	V+
2	GND
3	OUT 1
4	OUT WARN
5	n.c.

Diagrams

Typ. response behavior




x Distance [m]
y Misalignment [m]

Operation and display


LEDs

LED	Display	Meaning
1	Green, continuous light	Operational readiness
2	Yellow, continuous light	Light path free
	Yellow, flashing	Light path free, no function reserve
3	Yellow, continuous light (behind lens cover)	Light path free
	Yellow, flashing (behind lens cover)	Light path free, minimum function reserve

Suitable transmitters

	Part no.	Designation	Article	Description
	50134450	LS49C-TB	Throughbeam photoelectric sensor transmitter	Operating range limit: 0 ... 150 m Light source: LED, Red Supply voltage: DC Connection: Terminal, 5 -pin

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	Part no.	Designation	Article	Description
	50134451	LS49C.8-TB	Throughbeam photoelectric sensor transmitter	Operating range limit: 0 ... 150 m Light source: LED, Red Supply voltage: DC Connection: Terminal, 5 -pin Special design: Activation input

Part number code

Part designation: **AAA49Cd.EEfG/iJ-KL**

AAA49C	Operating principle / construction: PRK49C: retro-reflective photoelectric sensor with polarization filter HT49C: diffuse reflection sensor with background suppression LS49C: throughbeam photoelectric sensor transmitter LE49C: throughbeam photoelectric sensor receiver
d	Light type: n/a: red light l: infrared light
EE	Operating voltage: n/a: 10 ... 30 V, DC UC: 20 ... 250V AC/DC (all-mains design)
f	Equipment: H: with heating D: depolarizing media 1: 270° potentiometer 8: activation input (activation with high signal)
iJ	Switching output / Function / OUT1OUT2: 2: NPN transistor output, light switching N: NPN transistor output, dark switching 4: PNP transistor output, light switching P: PNP transistor output, dark switching W: warning output TS: Relay, NC contact/NO contact M4: Low impedance MOSFET semiconductor switching output, NO contact
KL	Electrical connection: TB: Terminal block - terminal compartment with spring terminals (5 x 1.5 mm ²) n/a: cable, standard length 2000 mm

Note

A list with all available device types can be found on the Leuze electronic website at www.leuze.com.

Notes

Observe intended use!

- This product is not a safety sensor and is not intended as personnel protection.
- The product may only be put into operation by competent persons.
- Only use the product in accordance with its intended use.

For UL applications:


- For UL applications, use is only permitted in Class 2 circuits in accordance with the NEC (National Electric Code).
- These proximity switches shall be used with UL Listed Cable assemblies rated 30V, 0.5A min, in the field installation, or equivalent (categories: CYJV/CYJV7 or PVVA/PVVA7)

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- All-insulated, rating voltage 250 VAC

Accessories

Mounting technology - Mounting brackets

	Part no.	Designation	Article	Description
	50025570	BT 96	Mounting device	Design of mounting device: Angle, L-shape Fastening, at system: Through-hole mounting Mounting bracket, at device: Screw type Type of mounting device: Rigid Material: Metal

Mounting technology - Rod mounts

	Part no.	Designation	Article	Description
	50128380	BTU 460M-D12	Mounting system	Design of mounting device: Mounting system Fastening, at system: For 12 mm rod Mounting bracket, at device: Screw type Type of mounting device: Adjustable, Turning, 360° Material: Metal

Note

A list with all available accessories can be found on the Leuze electronic website in the Download tab of the article detailed page.