

Technical data sheet Throughbeam photoelectric sensor Part no.: 50127442 LE49C.UC/TS



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49C

Receiver

Technical data

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Basic data

Series
Operating principle
Device type

Optical data Operating range Operating range Operating range limit

Operating range limit

Guaranteed operating range
0 120 m
Typical operating range
0.5 150 m

Polarity reversal protection

Short circuit protected Transient protection

Throughbeam principle

Electrical data

Performance data Supply voltage U_B Power consumption (with AC)

в 20 ... 250 V, AC/DC ion (with AC) 1.5 V·A

Outputs

Switching outputs			
Voltage type	AC/DC		
Switching current, max.	2,500 mA		
Switching voltage	250 V AC/DC		
Switching output 1 Switching element	Relay, NC		
Switching principle	Light switching		

 Switching output 2

 Switching element
 Relay, NO

 Switching principle
 Light switching

Timing

Switching frequency	25 Hz
Response time	20 ms
Readiness delay	300 ms

Connection

Connection 1		
Function	Signal OUT	
	Voltage supply	
Type of connection	Cable	
Cable length	2,000 mm	
Sheathing material	PVC	
Cable color	Black	
Number of conductors	5 -wire	
Wire cross section	0.34 mm ²	

Dimension (W x H x L) 31 mm x 104 mm x 55.5 mm Plastic, PC Housing material 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 Ш Protection class c UL US Certifications Standards applied IEC 60947-5-2 Classification Customs tariff number 85365080 eCl@ss 8.0 27270901 eCl@ss 9.0 27270901 **ETIM 5.0** EC002716

EC002716

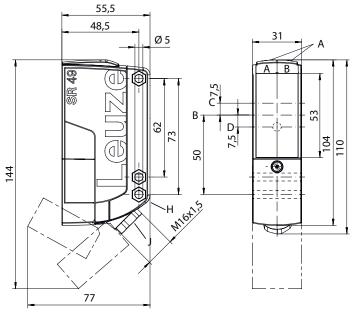
Mechanical data

ETIM 6.0

Dimensioned drawings

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All dimensions in millimeters



- AA Green LED
- AB Yellow LED Optical axis

Receiver

В

С

D Yellow LED

- G Countersinking for SK nut M5, 4.2 mm deep
- Cable entry with M16 x 1.5 screw fitting for $\ensuremath{\ensuremath{\mathcal{Q}}}$ J
- 5 ... 10 mm

Electrical connection

Connection 1

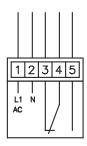
Function	
Function	Signal OUT
	Voltage supply
Type of connection	Cable
Cable length	2,000 mm
Sheathing material	PVC
Cable color	Black
Number of conductors	5 -wire
Wire cross section	0.34 mm ²

Conductor color	Conductor assignment
Brown	+ / L1
Blue	- / N
White	OUT 1
Gray	COM
Black	OUT 2

Circuit diagrams

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AC

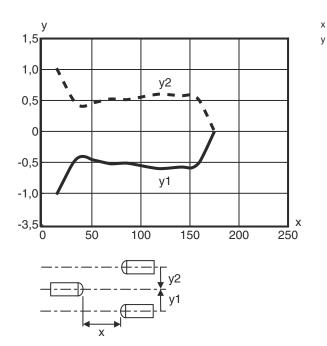


DC

12345 + c /

Diagrams

Typ. response behavior



Operation and display

Display

LED

М	ni	in	a
	 		9

1	Green, continuous light	Operational readiness
2	Yellow, continuous light	Light path free

Distance [m]

Misalignment [m]

Operation and display

LED	Display	Meaning
2	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
50127438	LS49C.UC	Throughbeam photoelectric sensor transmitter	Operating range limit: 0 150 m Light source: LED, Red Supply voltage: AC/DC Connection: Cable, 2,000 mm, 2 -wire

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 I: 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
Not	e
6	A list with all available device types can be found on the Leuze website at www.leuze.com.

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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.

Further information

- All-insulated, rating voltage 250 VAC
- · With inductive or capacitive load, provide suitable spark extinction (snubber)

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
10	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
6	♣ A list with all available accessories can be found on the Leuze website in the Download tab of the article detailed page.