SMART SENSOR BUSINESS

Leuze electronic

the sensor people





Part no.: 50127448 LE49CI.UC1/M4 Throughbeam photoelectric sensor receiver



Figure can vary

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Technical data

Basic data		
Series	49C	
Operating principle	Throughbeam principle	
Device type	Receiver	
Optical data		
- Operating range	Guaranteed operating range	
Operating range	0 120 m	
Operating range limit	Typical operating range	
Operating range limit	0.5 150 m	
Electrical data		
Protective circuit	Polarity reversal protection Short circuit protected Transient protection	
Performance data		
Supply voltage U _B	20 250 V , AC/DC	
Power consumption (with AC)	1.5 V·A	
Outputs		
Number of digital switching outputs	1 Piece(s)	
Switching outputs		
Voltage type	AC/DC	
Switching current, max.	400 mA	
Switching power	100 V·A	
Switching voltage	250 V AC/DC	
Switching output 1		
Switching element	MOSFET semiconductor, NO (normally open)	
Switching principle	Light/dark reversible	
Timing		
Switching frequency	150 Hz	
Response time	3.3 ms	
Readiness delay	300 ms	
Connection		
Connection 1		
Function	Signal OUT Voltage supply	
Type of connection	Cable	
Cable length	2,000 mm	
	PVC	
Sheathing material Cable color	PVC Black	
Sheathing material		
Sheathing material Cable color	Black	
Sheathing material Cable color Number of conductors	Black 5 -wire	
Sheathing material Cable color Number of conductors Wire cross section	Black 5 -wire	
Sheathing material Cable color Number of conductors Wire cross section	Black 5 -wire 0.34 mm²	

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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)
Operational controls	270° potentiometer Teach button
Function of the operational control	Activation of the time module for dropout delay Light/dark switching Sensitivity adjustment
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	85365080
eCl@ss 8.0	27270901
eCl@ss 9.0	27270901
ETIM 5.0	EC002716

EC002716

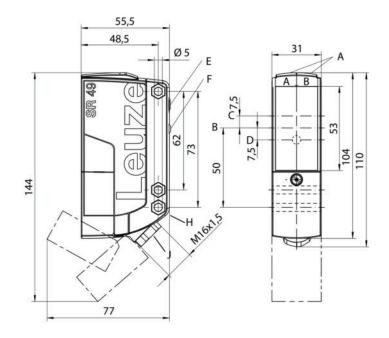
Dimensioned drawings

All dimensions in millimeters

ETIM 6.0

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AA Green LED

- AB Yellow LED
- B Optical axis
- C Receiver
- D Yellow LED
- E Sensitivity adjustment
- F Teach button
- G Countersinking for SK nut M5, 4.2 mm deep
- J Cable entry with M16 x 1.5 screw fitting for Ø 5 \dots 10 mm

Electrical 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

Conductor color	Conductor assignment
Brown	+ / L1
Blue	- / N
White	n.c.
Gray	OUT 1

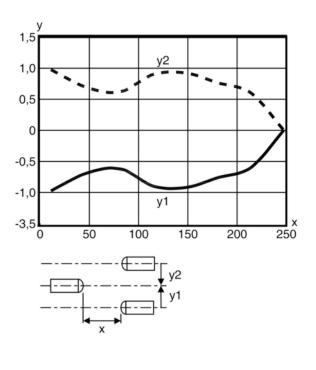
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Conductor color	Conductor assignment
Black	Base point

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		

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Suitable transmitters

Part no.	Designation	Article	Description
50127440	LS49CI.UC	Throughbeam photoelectric sensor transmitter	Operating range limit: 0 150 m Light source: LED, Infrared 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 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.
- All-insulated, rating voltage 250 VAC
- With inductive or capacitive load, provide suitable spark extinction (snubber)

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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
(C.	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.