SMART SENSOR BUSINESS

Leuze electronic

the sensor people





Part no.: 50127442 LE49C.UC/TS Throughbeam photoelectric sensor receiver



Figure can vary

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Part no.: 50127442 – LE49C.UC/TS – Throughbeam photoelectric sensor

Technical data

Basic data				
Series	49C			
Operating principle	Throughbeam principle			
Device type	Receiver			
20.000 000				
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	2 Piece(s)			
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			
Mechanical data Dimension (W x H x L)	31 mm x 104 mm x 55.5 mm			

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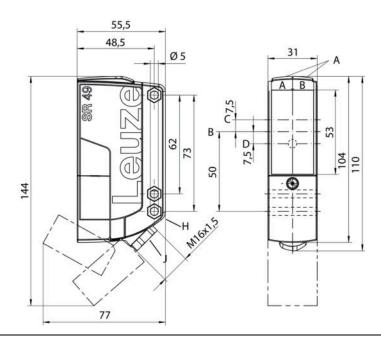
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Housing material	Plastic , PC			
Lens cover material	Plastic			
Net weight	150 g			
Housing color	Red			
Type of fastening	Through-hole mounting Via optional mounting device			
Operation and display				
Type of display	LED			
Number of LEDs	3 Piece(s)			
Environmental data				
Ambient temperature, operation	-40 60 °C			
Ambient temperature, storage	-40 70 °C			
Certifications				
Degree of protection	IP 67			
Protection class				
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	27270901		
ETIM 5.0	EC002716	EC002716		
ETIM 6.0	EC002716	EC002716		

Dimensioned drawings

All dimensions in millimeters



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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 \emptyset 5 ... 10 mm

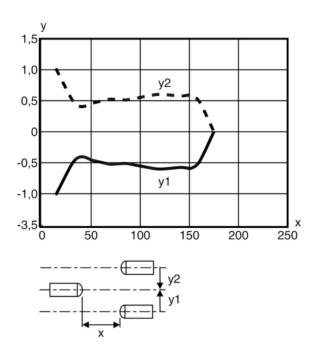
Electrical connection

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	OUT 1
Gray	Base point
Black	OUT 2

Diagrams

Typ. response behavior



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- Distance [m] Misalignment [m] х
- y

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
5012743	8 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

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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)

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
ED.	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.