

# **Technical data sheet** Throughbeam photoelectric sensor receiver

Part no.: 50130466

LE49CI.UCH1/M4-TB



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### **Technical data**



#### Basic data

Series	49C
Operating principle	Throughbeam principle
Device type	Receiver
Special version	
Special version	Heating
Optical data	
Operating range	see transmitter
Electrical data	
Protective circuit	Polarity reversal protection
	Short circuit protected
	Transient protection
Performance data	
Supply voltage U <sub>B</sub>	20 250 V, AC/DC
Power consumption (with AC)	1.5 V·A
Outputs	

### **Switching outputs**

Number of digital switching outputs 1 Piece(s)

Digital switching output
AC/DC
400 mA
100 V·A
250 V AC/DC

### Switching output 1

Assignment	Connection 1, pin 4
Switching element	MOSFET semiconductor, NO (normally open)
Switching principle	Light/dark switchable

### Time behavior

Switching frequency	150 Hz
Response time	3.3 ms
Readiness delay	300 ms

#### Connection

**Number of connections** 

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

1 Piece(s)

### Mechanical data

Dimension (W x H x L)	31 mm x 104 mm x 55.5 mm
Housing material	Plastic
Plastic housing	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)
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
Approvals	c UL US
Standards applied	IFC 60947-5-2

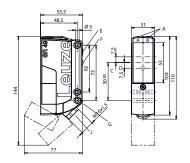
#### Classification

Customs tariff number	85365080
ECLASS 5.1.4	27270901
ECLASS 8.0	27270901
ECLASS 9.0	27270901
ECLASS 10.0	27270901
ECLASS 11.0	27270901
ECLASS 12.0	27270901
ECLASS 13.0	27270901
ECLASS 14.0	27270901
ECLASS 15.0	27270901
ETIM 5.0	EC002716
ETIM 6.0	EC002716
ETIM 7.0	EC002716
ETIM 8.0	EC002716
ETIM 9.0	EC002716
ETIM 10.0	EC002716

## **Dimensioned drawings**

Leuze

All dimensions in millimeters



- AA Green LED
- AB Yellow LED
- Optical axis
- С Receiver
- D Yellow LED
- Ε Sensitivity adjustment
- Teach button
- Countersinking for SK nut M5, 4.2 mm deep
- Cable entry with M16 x 1.5 screw fitting for Ø 5  $\dots$  10



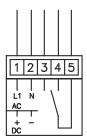
### **Electrical connection**

#### **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	+ / L1
2	- / N
3	n.c.
4	OUT 1
5	COM

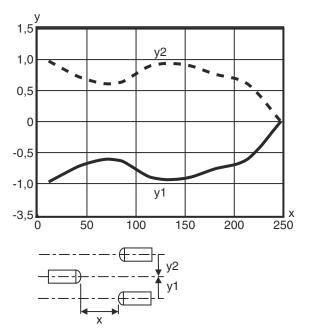
# **Circuit diagrams**



### **Diagrams**



### Typ. response behavior



- Distance [m]
- Misalignment [m]

# **Operation and display**

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 (alignment display behind lens cover)	Light path free
	Yellow, flashing (alignment display behind lens cover)	Light path free, minimum function reserve

### Suitable transmitters

Suitable transmitters				
	Part no.	Designation	Operating range Operating range limit	Description
The state of the s	50130463	LS49CI.UCH/TB	0.5 120 m 0 150 m	Special version: Heating Operating range limit: 0 150 m Light source: LED, Infrared Supply voltage: AC/DC Connection: Terminal, 5 -pin

### 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

### Part number code



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)
iN	Switching output / Function / OUT10UT2 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 X: pin not used
KL	Electrical connection TB: Terminal block - terminal compartment with spring terminals (5 x 1.5 mm²) n/a: cable, standard length 2000 mm M12: M12 connector, 4-pin (plug)

#### Note



### **Notes**



### Observe intended use!



- Only use the product in accordance with its intended use.

### **Further information**

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

We reserve the right to make technical changes

### **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 website in the Download tab of the article detailed page.