## SMART SENSOR BUSINESS

# Leuze electronic

the sensor people





Part no.: 50126547 SLS46C-70.K48 Single beam safety device transmitter

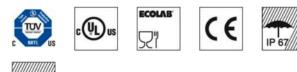


Figure can vary

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- · Dimensioned drawings
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## Part no.: 50126547 – SLS46C-70.K48 – Single beam safety device transmitter

### **Technical data**

Basic data			
Series	46C		
Special design			
Special design	Activation input		
Functions			
Functions	Activation input		
Characteristic parameters			
Гуре	4, IEC/EN 61496, in combination with MSI-TRMB safety relay		
SIL	3, IEC 61508, in combination with MSI-TRMB safety relay		
SILCL	3, IEC/EN 62061, in combination with MSI-TRMB safety relay		
Performance Level (PL)	e , EN ISO 13849-1:2008 , In combination with MSI-TRMB safety re- lay		
MTTFd	900 years , EN ISO 13849-1		
Mission time T <sub>M</sub>	20 years , EN ISO 13849-1		
Category	4, EN ISO 13849:2008, In combination with MSI-TRMB safety relay		
Optical data			
Operating range	5 70 m		
Operating range limit	5 80 m		
Light source	LED , Red		
LED light wavelength	630 nm		
Transmitted-signal shape	Pulsed		
LED group	1		
Opening angle, max.	-2.5 2.5 °		
Electrical data			
Performance data			
Supply voltage UB	24 V , DC , -20 20 $\%$ , Incl. residual ripple		
Residual ripple	10 % , From U <sub>B</sub>		
Open-circuit current	0 40 mA		
Inputs			
Number of activation inputs	1 Piece(s)		
Activation inputs			
Voltage type	DC		
Switching voltage	high: ≥8V Iow: ≤1.5V		
Switching voltage high, min.	8 V		
Switching voltage low, max.	1.5 V		
Activation/disable delay	1 ms		
Input resistance	10,000 Ω , -30 30 %		
Activation input 1			
Assignment	Connection 1, conductor 4		
Active switching state High			

Timing

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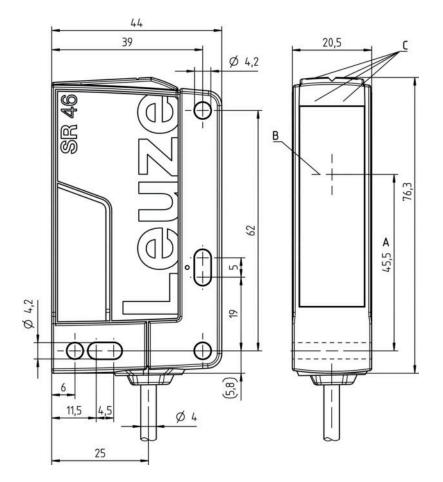
Switching frequency   250 Hz     Response time   2.5 ms     Readiness delay   300 ms     Connection     Number of connections   1 Piece(s)     Connection 1     Type of connection   Cable     Function   Signal IN     Voltage supply   Cable length     Sheathing material   PUR     Number of conductors   4 -wire     Wire cross section   0.21 mm²     Mechanical data     Design   Cubic     Dimension (W x H x L)   20.5 mm x 76.3 mm x 44 mm     Housing material   Plastic , PC-PBT     Lens cover material   Plastic / PMMA				
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Housing material Plastic , PC-PBT				
Lens cover material Plastic / PMMA				
Net weight 100 g				
5	Yellow			
pe of fastening Through-hole mounting				
Compatibility of materials ECOLAB				
Operation and display				
Type of display LED				
Number of LEDs 2 Piece(s)				
Environmental data				
Ambient temperature, operation -30 60 °C				
Ambient temperature, storage-30 70 °C				
Certifications				
Degree of protection IP 67 IP 69K				
Protection class III , Rating voltage 50 V				
Certifications c TÜV NRTL US c UL US				
Standards applied IEC 60947-5-2, IEC/EN 61496				
Classification				
Classification Customs tariff number 85365019				
eCl@ss 8.0 27272701				
eCl@ss 9.0 27272701				
ETIM 5.0 EC001831				
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Part no.: 50126547 – SLS46C-70.K48 – Single beam safety device transmitter

#### Dimensioned drawings

All dimensions in millimeters



A Optical axis

B Transmitter and receiver

C Green/yellow indicator diodes

### **Electrical connection**

Connection 1	
Type of connection	Cable
Function	Signal IN Voltage supply
Cable length	2,000 mm
Sheathing material	PUR
Cable color	Black
Number of conductors	4 -wire
Wire cross section	0.21 mm <sup>2</sup>

Conductor color	Conductor assignment
Brown	+24V
White	n.c.
Blue	GND
Black	Active

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### Part no.: 50126547 – SLS46C-70.K48 – Single beam safety device transmitter

### **Operation and display**

#### LEDs

LED	Display	Meaning
1	Green, continuous light	Ready
2	Yellow, continuous light	Transmitter activated

### Suitable receivers

	Part no.	Designation	Article	Description
<b>I</b>	50126329		Single beam safety device receiver	Response time: 2.5 ms Connection: Cable, 2,000 mm, PUR

### Notes

Observe intended use!

- The product may only be put into operation by competent persons.
- Only use the product in accordance with its intended use.

#### ATTENTION!

- The SLS46CK4 safety sensors are a type 4 AOPD only in combination with the MSI-TRM safety relays.
- For mounting, electrical connection and operation, the operating instructions of the MSI-TRM safety relays are to be observed.

#### For UL applications:

- Certification: UL 508, C22.2 No.14-13
- Only for use in "class 2" circuits
- 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)
- Typ. operating range limit: max. attainable range without function reserve
- Operating range: recommended range with function reserve
- Light source: Average life expectancy 100,000 h at an ambient temperature of 25 °C

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## Part no.: 50126547 – SLS46C-70.K48 – Single beam safety device transmitter

### Accessories

Connection technology - Connection unit

Part no.	Designation	Article	Description
547931	MSI-TRMB-01	Safety relay	
547932	MSI-TRMB-02	Safety relay	

## Connection technology - Connection cables

Part no.	Designation	Article	Description
50130653	KD U-M12-4A- V1-100	Connection cable	Connection 1: Connector, M12, Axial, Female, A-coded, 4 -pin Connection 2: Open end Shielded: No Cable length: 10,000 mm Sheathing material: PVC
50130690	KD U-M12-4W- V1-050	Connection cable	Connection 1: Connector, M12, Angled, Female, A-coded, 4 -pin Connection 2: Open end Shielded: No Cable length: 5,000 mm Sheathing material: PVC
50130691	KD U-M12-4W- V1-100	Connection cable	Connection 1: Connector, M12, Angled, Female, A-coded, 4 -pin Connection 2: Open end Shielded: No Cable length: 10,000 mm Sheathing material: PVC

## Mounting technology - Mounting brackets

	Part no.	Designation	Article	Description
E 13	50105315	BT 46	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

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## Muting - Mounting systems

Part no.	Designation	Article	Description
50117252	BTU 300M-D12	Mounting system	Contains: 2x M4 x 25 screw, 2x M4 x 20 screw, 4x position washers Design of mounting device: Mounting system Fastening, at system: For 12 mm rod, Sheet-metal mounting Mounting bracket, at device: Screw type, Suited for M4 screws Type of mounting device: Clampable, Adjustable, Turning, 360° Material: Metal

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