## SMART SENSOR BUSINESS

# Leuze electronic

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Part no.: 50121912 SLS46CI-70.K28 Single beam safety device transmitter

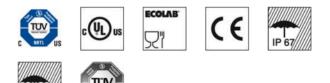


Figure can vary

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### Part no.: 50121912 – SLS46CI-70.K28 – Single beam safety device transmitter

#### **Technical data**

Desis defe	
Basic data	460
Series	46C
Functions	
Functions	Activation input
Characteristic parameters	
Туре	2, IEC/EN 61496
MTTF <sub>d</sub>	400 years, EN ISO 13849-1
Mission time T <sub>M</sub>	20 years, EN ISO 13849-1
Optical data	
Operating range	5 70 m
Operating range limit	5 80 m
Light source	LED, Infrared
LED light wavelength	940 nm
Transmitted-signal shape	Pulsed
LED group	1
Opening angle, max.	-5 5 °
Electrical data	
Protective circuit	Short circuit protected
	Polarity reversal protection
Performance data	
Supply voltage	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
	low: ≤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	
Switching frequency	250 Hz
Response time	2.5 ms
Readiness delay	300 ms
Connection	
Number of connections	1 Piece(s)

### Part no.: 50121912 – SLS46CI-70.K28 – Single beam safety device transmitter

Connection 1					
Type of connection	Cable				
Function	Voltage supply Signal IN	Voltage supply Signal IN			
Cable length	2,000 mm	2,000 mm			
Sheathing material	PUR				
Number of conductors	4 -wire				
Wire cross section	0.21 mm <sup>2</sup>				
lechanical data					
Design	Cubic				
Dimension (W x H x L)	20.5 mm x 76.3 mm x 44 mm				
lousing material	Plastic, PC-PBT				
ens cover material	Plastic / PMMA				
let weight	100 g				
lousing color	Red				
ype of fastening	Through-hole mounting				
Compatibility of materials	ECOLAB				
Dperation and display					
ype of display	LED				
lumber of LEDs	2 Piece(s)				
nvironmental data					
Implent temperature, operation	-30 60 °C				
mbient temperature, operation	-30 60 °C -30 70 °C				
mbient temperature, storage					
mbient temperature, storage	-30 70 °C IP 69K				
Ambient temperature, storage	-30 70 °C IP 69K IP 67				
Ambient temperature, storage Certifications Degree of protection Protection class	-30 70 °C IP 69K IP 67 III, Rating voltage 50 V c TÜV NRTL US TÜV Süd				
Ambient temperature, storage Certifications Degree of protection Protection class Certifications	-30 70 °C IP 69K IP 67 III, Rating voltage 50 V c TÜV NRTL US TÜV Süd c UL US				
Ambient temperature, storage Certifications Degree of protection Protection class Certifications Standards applied	-30 70 °C IP 69K IP 67 III, Rating voltage 50 V c TÜV NRTL US TÜV Süd c UL US				
Ambient temperature, storage         Certifications         Degree of protection         Protection class         Certifications         Standards applied         Classification	-30 70 °C IP 69K IP 67 III, Rating voltage 50 V c TÜV NRTL US TÜV Süd c UL US IEC 60947-5-2, IEC/EN 61496				

#### Suitable receivers

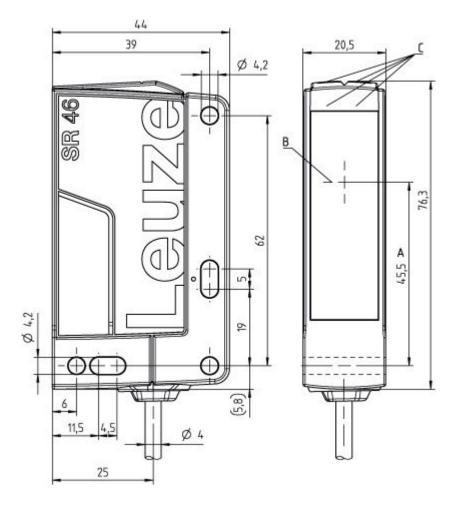
Part no.	Designation	Article	Description
50121920	SLE46CI-70.K2/ 4P	Single beam safety device receiver	Response time: 2.5 ms Connection: Cable, 2,000 mm, PUR

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Part no.: 50121912 – SLS46CI-70.K28 – Single beam safety device transmitter

#### **Dimensioned drawings**

All dimensions in millimeters



A B C Optical axis

Transmitter and receiver

Green/yellow indicator diodes

#### **Electrical connection**

Connection 1	
Type of connection	Cable
Function	Voltage supply Signal IN
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

### Part no.: 50121912 – SLS46CI-70.K28 – Single beam safety device transmitter

Conductor color	Conductor assignment
Black	Active

### **Operation and display**

LEDs

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

### Accessories

## Mounting technology - Mounting brackets

	Part no.	Designation	Article	Description
	50118543	BT 300M.5	Mounting bracket	Design of mounting device: Angle, L-shape Fastening, at system: Through-hole mounting Mounting bracket, at device: Screw type Type of mounting device: Adjustable Material: Stainless steel
E13	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

# Mounting technology - Rod mounts

	Part no.	Designation	Article	Description
f:	50117253	BTU 300M-D10	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 10 mm rod, Sheet-metal mounting Mounting bracket, at device: Screw type Type of mounting device: Clampable, Adjustable, Turning, 360° Material: Metal
f:	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 Type of mounting device: Clampable, Adjustable, Turning, 360° Material: Metal
f:	50117251	BTU 300M-D14	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 14 mm rod, Sheet-metal mounting Mounting bracket, at device: Screw type Type of mounting device: Clampable, Adjustable, Turning, 360° Material: Metal

### Part no.: 50121912 – SLS46CI-70.K28 – Single beam safety device transmitter

	Part no.	Designation	Article	Description
6	50120425	BTU 300M.5-D12	Mounting system	Contains: 2x M4 x 25 screw, 2x M4 x 20 screw, 2x position washers, 2x M4 mounting nut Design of mounting device: Mounting system Fastening, at system: For 12 mm rod, Sheet-metal mounting Mounting bracket, at device: Screw type Type of mounting device: Clampable, Adjustable, Turning, 360° Material: Stainless steel
	50122797	BTU 346M-D12	Mounting system	Contains: 2x M4 x 25 screw, 2x position washers Design of mounting device: Mounting system Fastening, at system: For 12 mm rod, Sheet-metal mounting Mounting bracket, at device: Screw type Type of mounting device: Turning, 360°, Clampable, Adjustable Material: Metal
	50122798	BTU 346M.5-D12	Mounting system	Design of mounting device: Mounting system Fastening, at system: For 12 mm rod, Sheet-metal mounting Mounting bracket, at device: Screw type Type of mounting device: Turning, 360°, Clampable, Adjustable Material: Stainless steel
	50119332	BTU 900M-D10	Mounting system	Contains: 2x M4 x 10 screw, 2x position washers Design of mounting device: Mounting system Fastening, at system: For 10 mm rod, Sheet-metal mounting Mounting bracket, at device: Screw type Type of mounting device: Clampable, Turning, 360°, Swiveling Material: Metal
ſ.	50119331	BTU 900M-D12	Mounting system	Contains: 2x position washers, 2x M4 x 10 screw Design of mounting device: Mounting system Fastening, at system: For 12 mm rod, Sheet-metal mounting Mounting bracket, at device: Screw type Type of mounting device: Clampable, Turning, 360°, Swiveling Material: Metal
Ţ.	50119330	BTU 900M-D14	Mounting system	Contains: 2x position washers, 2x M4 x 10 screw Design of mounting device: Mounting system Fastening, at system: For 14 mm rod, Sheet-metal mounting Mounting bracket, at device: Screw type Type of mounting device: Clampable, Turning, 360°, Swiveling Material: Metal

## Mounting technology - Other

Part no.	Designation	Article	Description
50136665	BTX 046M		Contains: 2x M4 x 30 screw, 1 M4 x 12 screw Design of mounting device: Mounting plate Fastening, at system: Through-hole mounting Mounting bracket, at device: Screw type Material: Metal

### Alignment aids

Part no.	Designation	Article	Description
50129659	ARH 46C	Alignment aid	Light source: laser, Red Housing material: Metal
50109545	SAT 5	Alignment aid	Housing material: Metal

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#### Protective screens

Part no.	Designation	Article	Description
50132604	SG 46C	Protective screen	Material: Glass

#### 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.

#### 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