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Part no.: 50126545  
**SLS46C-40.K48**  
Single beam safety device transmitter



## Contents

- Technical data
- Dimensioned drawings
- Electrical connection
- Operation and display
- Suitable receivers
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## Technical data

<b>Basic data</b>	
Series	46C
<b>Special design</b>	
Special design	Activation input
<b>Functions</b>	
Functions	Activation input
<b>Characteristic parameters</b>	
Type	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 relay
MTTF <sub>d</sub>	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
<b>Optical data</b>	
Operating range	0.25 ... 40 m
Operating range limit	0.25 ... 48 m
Light source	LED , Red
LED light wavelength	630 nm
Transmitted-signal shape	Pulsed
LED group	1
Opening angle, max.	-2.5 ... 2.5 °
<b>Electrical data</b>	
<b>Performance data</b>	
Supply voltage U <sub>B</sub>	24 V , DC , -20 ... 20 % , Incl. residual ripple
Residual ripple	10 % , From U <sub>B</sub>
Open-circuit current	0 ... 40 mA
<b>Inputs</b>	
Number of activation inputs	1 Piece(s)
<b>Activation inputs</b>	
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 %
<b>Activation input 1</b>	
Assignment	Connection 1, conductor 4
Active switching state	High
<b>Timing</b>	

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Switching frequency	250 Hz
Response time	2.5 ms
Readiness delay	300 ms

**Connection**

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

**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
Net weight	100 g
Housing color	Yellow
Type 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**

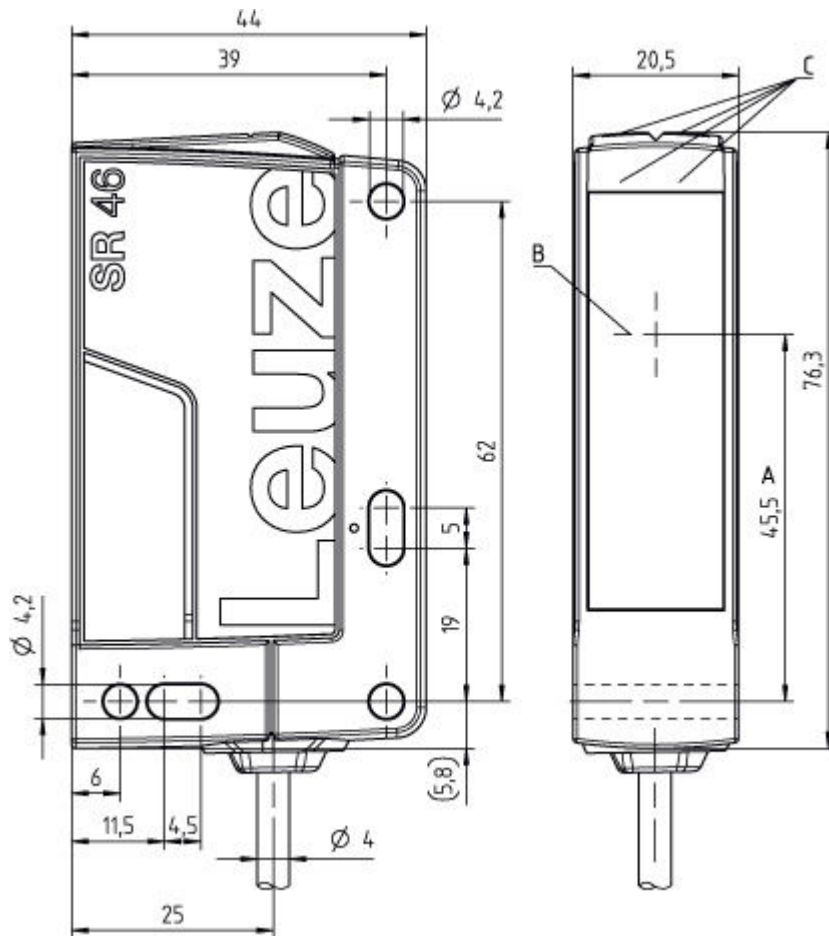
Degree of protection	IP 67 IP 69K
Protection class	III , Rating voltage 50 V
Certifications	c TÜV NRTL US c UL US
Standards applied	IEC 60947-5-2, IEC/EN 61496

**Classification**

Customs tariff number	85365019
eCl@ss 8.0	27272701
eCl@ss 9.0	27272701
ETIM 5.0	EC001831
ETIM 6.0	EC001831

## 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

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Conductor color	Conductor assignment
Black	Active

## 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
	50126327	SLE46C-40.K4/4P	Single beam safety device receiver	Response time: 2.5 ms Connection: Cable, 2,000 mm, PUR

## Notes

Observe intended use!
<ul style="list-style-type: none"> <li>The product may only be put into operation by competent persons.</li> <li>Only use the product in accordance with its intended use.</li> </ul>

ATTENTION!
<ul style="list-style-type: none"> <li>The SLS46CK4 safety sensors are a type 4 AOPD only in combination with the MSI-TRM safety relays.</li> <li>For mounting, electrical connection and operation, the operating instructions of the MSI-TRM safety relays are to be observed.</li> </ul>



For UL applications:
<ul style="list-style-type: none"> <li>Certification: UL 508, C22.2 No.14-13</li> <li>Only for use in "class 2" circuits</li> <li>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)</li> </ul>

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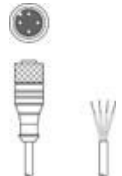


- Typ. operating range limit: max. attainable range without function reserve
- Operating range: recommended range with function reserve
- Light source: Average life expectancy 100,000 h at an ambient temperature of 25 °C

### 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
	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 Type of mounting device: Clampable, Adjustable, Turning, 360° Material: Metal