

the sensor people





Figure can vary

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













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- Electrical connection
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Technical data

| Basic data | | | |
|---|---|--|--|
| Series | 46C | | |
| | | | |
| Characteristic parameters | | | |
| Туре | 4, IEC/EN 61496 | | |
| MTTFd | 900 years, EN ISO 13849-1 | | |
| Mission time T _M | 20 years, EN ISO 13849-1 | | |
| | | | |
| 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 protection class | 1 | | |
| | | | |
| Timing | | | |
| Switching frequency | 250 Hz | | |
| Response time | 2.5 ms | | |
| Readiness delay | 300 ms | | |
| | | | |
| Electrical data | | | |
| Protective circuit | Polarity reversal protection, Short circuit protected | | |
| Performance data | | | |
| Supply voltage | 24 V, DC, -20 20 %, Incl. residual ripple | | |
| Residual ripple | 10 %, From U _B | | |
| Open-circuit current | 0 40 mA | | |
| Inputs | | | |
| | | | |
| Number of activation inputs | 1 Piece(s) | | |
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| | 1 Piece(s) | | |
| Activation inputs | | | |
| Activation inputs Voltage type | DC | | |
| Activation inputs Voltage type Switching voltage Switching voltage high, min. Switching voltage low, max. | DC high: ≥8V, low: ≤1.5V | | |
| Activation inputs Voltage type Switching voltage Switching voltage high, min. Switching voltage low, max. Activation/disable delay | DC high: ≥8V, low: ≤1.5V 8 V 1.5 V 1 ms | | |
| Activation inputs Voltage type Switching voltage Switching voltage high, min. Switching voltage low, max. | DC high: ≥8V, low: ≤1.5V 8 V 1.5 V | | |
| Activation inputs Voltage type Switching voltage Switching voltage high, min. Switching voltage low, max. Activation/disable delay Input resistance Activation input 1 | DC high: ≥8V, low: ≤1.5V 8 V 1.5 V 1 ms 10.000 Ω, -30 30 % | | |
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| Activation inputs Voltage type Switching voltage Switching voltage high, min. Switching voltage low, max. Activation/disable delay Input resistance Activation input 1 Assignment | DC high: ≥8V, low: ≤1.5V 8 V 1.5 V 1 ms 10.000 Ω, -30 30 % Connection 1, conductor 4 | | |



| Connection 1 | | |
|----------------------|---------------------------|--|
| Type of connection | Cable | |
| Function | Signal IN, Voltage supply | |
| Cable length | 2.000 mm | |
| Sheathing material | PUR | |
| Number of conductors | 4 -wire | |
| Core cross section | 0.21 mm² | |

| Cubic | |
|---------------------------|---|
| 20.5 mm x 76.3 mm x 44 mm | |
| Plastic, PC-PBT | |
| Plastic (PMMA) | |
| 100 g | |
| Yellow | |
| Through-hole mounting | |
| - | 20.5 mm x 76.3 mm x 44 mm Plastic, PC-PBT Plastic (PMMA) 100 g Yellow |

| 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 | | |
| Environmental test | ECOLAB | | |

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

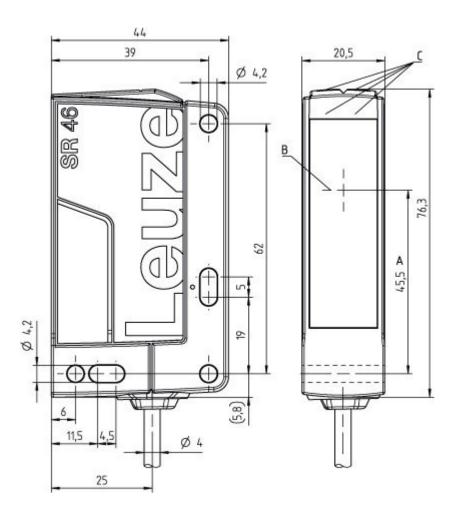
| Functions | | |
|-----------|------------------|--|
| Functions | Activation input | |

| Classification | | |
|----------------|----------|--|
| eCl@ss 8.0 | 27272701 | |
| eCl@ss 9.0 | 27272701 | |
| ETIM 5.0 | EC001831 | |

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 | Signal IN, Voltage supply | |
| Cable length | 2.000 mm | |
| Sheathing material | PUR | |
| Cable color | Black | |
| Number of conductors | 4 -wire | |
| Core cross section | 0.21 mm ² | |

| Conductor color | Conductor assignment |
|-----------------|----------------------|
| Brown | +24V |
| White | n.c. |
| Blue | GND |
| 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 |
|------|----------|-------------|---------|---|
| E 17 | 50105315 | BT 46 | | Design of mounting device: Angle, L-shape Mounting bracket, 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 |
|----------|----------------|-----------------|---|
| 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 Mounting bracket, 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 |
| 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 Mounting bracket, 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 |
| 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 Mounting bracket, 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 |
| 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 Mounting bracket, 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 |
| 50119332 | BTU 900M-D10 | Mounting system | Contains: 2x M4 x 10 screw, 2x position washers Design of mounting device: Mounting system Mounting bracket, 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 |



| | Part no. | Designation | Article | Description |
|----|----------|--------------|-----------------|--|
| | 50119331 | BTU 900M-D12 | Mounting system | Contains: 2x position washers, 2x M4 x 10 screw Design of mounting device: Mounting system Mounting bracket, 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 |
| T. | 50119330 | BTU 900M-D14 | Mounting system | Contains: 2x position washers, 2x M4 x 10 screw Design of mounting device: Mounting system Mounting bracket, 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 |

Alignment aids

| Part no. | Designation | Article | Description |
|----------|-------------|---------------|-------------------------|
| 50109545 | SAT 5 | Alignment aid | Housing material: Metal |

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
- Average life expectancy 100,000 h at an ambient temperature of 25 °C

Leuze electronic GmbH + Co. KG, In der Braike 1, D-73277 Owen Telefon: +49 7021 573-0, Telefax +49 7021 573-199