



Figure can vary

Part no.: 50121914
SLS46CI-40.K28
Single beam safety device transmitter



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Technical data

| Basic data | |
|----------------------------------|--|
| Series | 46C |
| Functions | |
| Functions | Activation input |
| Characteristic parameters | |
| Type | 2, IEC/EN 61496, in combination with a suitable test monitoring unit, e.g. MSI-TR1B |
| SIL | 1, IEC 61508, In combination with a suitable test monitoring unit, e.g. MSI-TR1B |
| SILCL | 1, IEC/EN 62061, In combination with a suitable test monitoring unit, e.g. MSI-TR1B |
| Performance Level (PL) | c, EN ISO 13849-1:2008, In combination with a suitable test monitoring unit, e.g. MSI-TR1B |
| MTTF _d | 400 years, EN ISO 13849-1 |
| PFH _D | 3E-10 per hour |
| Mission time T _M | 20 years, EN ISO 13849-1 |
| Category | 2, EN ISO 13849, In combination with a suitable test monitoring unit, e.g. MSI-TR1B |
| Optical data | |
| Operating range | 0.5 ... 40 m |
| Operating range limit | 0.5 ... 48 m |
| Light source | LED, Infrared |
| LED light wavelength | 940 nm |
| LED group | 1 |
| Transmitted-signal shape | Pulsed |
| Opening angle, max. | -5 ... 5 ° |
| Electrical data | |
| Protective circuit | Short circuit protected Polarity reversal protection |
| Performance data | |
| Supply voltage U _B | 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) |
| 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 |

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Timing

| | |
|---------------------|--------|
| 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 | Voltage supply Signal IN |
| Cable length | 2,000 mm |
| Sheathing material | PUR |
| Number of conductors | 4 -wire |
| Wire cross section | 0.21 mm ² |

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 | 50 g |
| Housing color | Red |
| 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

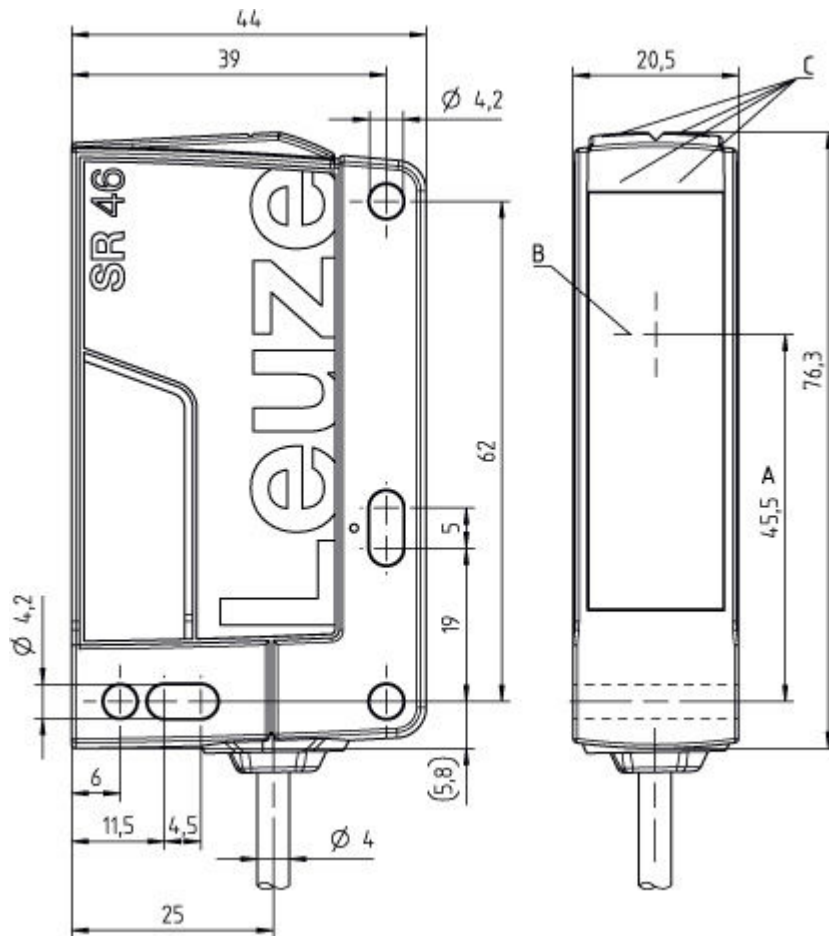
| | |
|----------------------|-------------------------------------|
| Degree of protection | IP 67 IP 69K |
| Protection class | III, Rating voltage 50 V |
| Certifications | c TÜV NRTL US c UL US TÜV Süd |
| Standards applied | IEC 60947-5-2, IEC/EN 61496 |

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 | 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 ² |

| Conductor color | Conductor assignment |
|-----------------|----------------------|
| Brown | V+ |
| 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 |
|--|----------|----------------------|--|---|
|  | 50121922 | SLE46CI-40.K2/ 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"> The product may only be put into operation by competent persons. Only use the product in accordance with its intended use. |



| For UL applications: |
|--|
| <ul style="list-style-type: none"> 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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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 |
|  | 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 |
|---|----------|----------------|-----------------|---|
|  | 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 |
|  | 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 |
|  | 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 |
|  | 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 |


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| | Part no. | Designation | Article | Description |
|---|----------|--------------|-----------------|--|
|  | 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 |
|  | 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 |
|  | 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 | Mounting plate | 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 |

Protective screens

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