

Technical data sheet

Single light beam safety device transmitter

Part no.: 50126547

SLS46C-70.K48

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For illustration purposes only



Technical data

Basic data

| | |
|--------|-----|
| Series | 46C |
|--------|-----|

Special version

| | |
|-----------------|------------------|
| Special version | Activation input |
|-----------------|------------------|

Functions

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

Characteristic parameters

| | |
|-----------------------------|---|
| 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 _d | 900 years, EN ISO 13849-1 |
| Mission time T _M | 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 |
| Wavelength | 630 nm |
| Transmitted-signal shape | Pulsed |
| LED group | 1 |
| Opening angle, max. | -2.5 ... 2.5 ° |

Electrical data

| | |
|--------------------|---|
| Protective circuit | Polarity reversal protection Short circuit protected |
|--------------------|---|

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: ≤ 1.5 V |
| 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 |

Time behavior

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

Connection

| | |
|-----------------------|------------|
| Number of connections | 1 Piece(s) |
|-----------------------|------------|

Connection 1

| | |
|----------------------|-----------------------------|
| Function | Signal IN Voltage supply |
| Type of connection | Cable |
| 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 |
| Plastic housing | 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

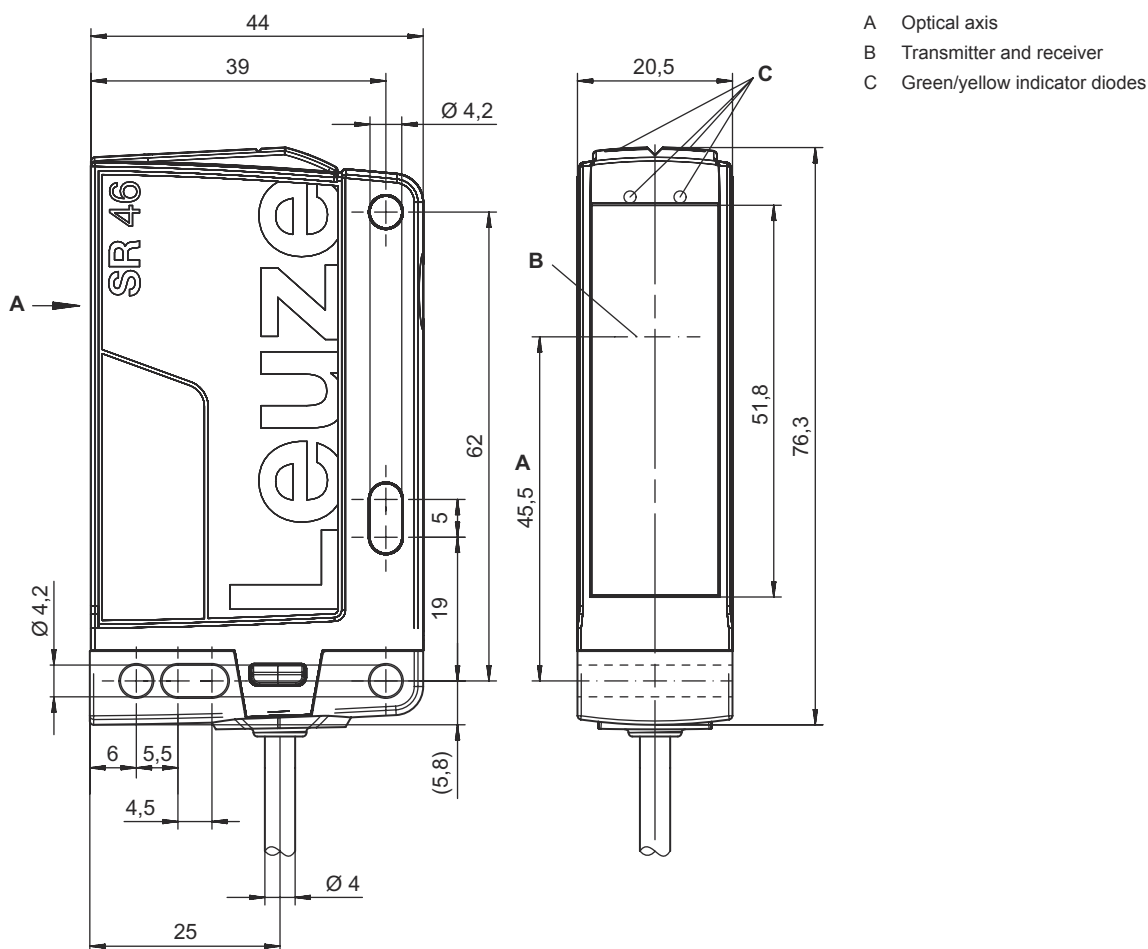
| | |
|----------------------|-----------------------------|
| Degree of protection | IP 67 IP 69K |
| Protection class | III, Rating voltage 50V |
| Approvals | c UL US |
| Standards applied | IEC 60947-5-2, IEC/EN 61496 |

Technical data

| | |
|-----------------------|----------|
| Customs tariff number | 85365019 |
| ECLASS 5.1.4 | 27272701 |
| ECLASS 8.0 | 27272701 |
| ECLASS 9.0 | 27272701 |
| ECLASS 10.0 | 27272701 |
| ECLASS 11.0 | 27272701 |
| ECLASS 12.0 | 27272701 |
| ECLASS 13.0 | 27272701 |
| ECLASS 14.0 | 27272701 |
| ECLASS 15.0 | 27272701 |
| ECLASS 16.0 | 27272701 |
| ETIM 5.0 | EC001831 |
| ETIM 6.0 | EC001831 |
| ETIM 7.0 | EC001831 |
| ETIM 8.0 | EC001831 |
| ETIM 9.0 | EC001831 |
| ETIM 10.0 | EC001831 |
| UNSPSC 26.08 | 32151804 |

Dimensioned drawings

All dimensions in millimeters



Electrical connection

Connection 1

| | |
|----------------------|----------------------|
| Function | Signal IN |
| | Voltage supply |
| Type of connection | Cable |
| 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 | +24 V |
| White | n.c. |
| Blue | GND |
| Black | Active |

Operation and display

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

Suitable receivers

| | Part no. | Designation | Article | Description |
|---|----------|-----------------|--|---|
|  | 50126329 | SLE46C-70.K4/4P | Single light 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.

Notes

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)

Further information


- Typ. operating range limit: max. attainable range without function reserve
- Operating range: recommended range with function reserve
- Light source: Average life expectancy 100,000h 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 | |

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 |

Accessories

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 available accessories can be found on the Leuze website in the Download tab of the article detailed page.