



Part no.: 50121911
SLS46CI-70.K28-M12
Single beam safety device transmitter

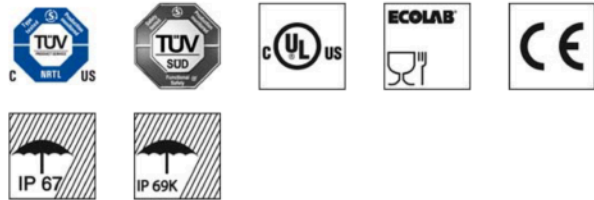


Figure can vary

Contents

- Technical data
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- Electrical connection
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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 MSI-TRMB safety relay |
| 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 | 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 | 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: ≤1.5V |
| 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, pin 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 | Connector |
| Function | Signal IN Voltage supply |
| Thread size | M12 |
| Material | Plastic |
| No. of pins | 4 -pin |

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

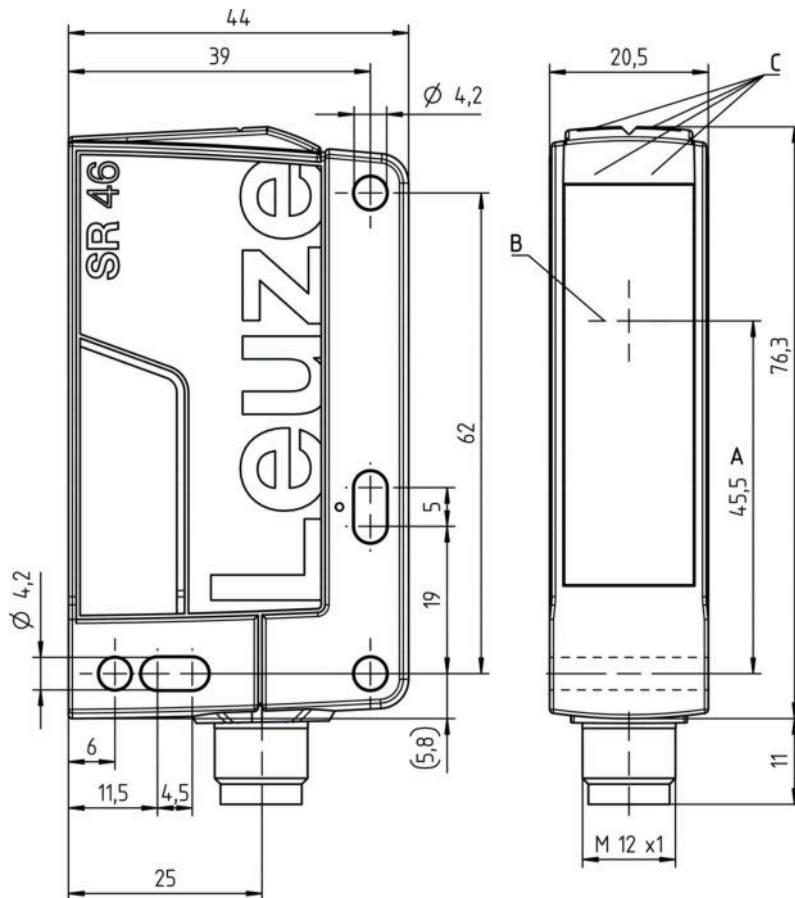
| | |
|----------------------|-------------------------------------|
| Degree of protection | IP 67 IP 69K |
| Protection class | III , Rating voltage 50 V |
| Certifications | c TÜV NRTL US c UL US TÜV Süd |
| Standards applied | IEC 60947-5-2, IEC/EN 61496 |

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

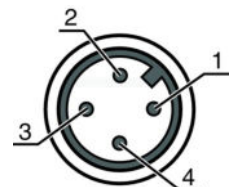


A Optical axis
 B Transmitter and receiver
 C Green/yellow indicator diodes

Electrical connection

| Connection 1 | |
|--------------------|-----------------------------|
| Type of connection | Connector |
| Function | Signal IN Voltage supply |
| Thread size | M12 |
| Type | Male |
| Material | Plastic |
| No. of pins | 4 -pin |
| Encoding | A-coded |

| Pin | Pin assignment | Conductor color |
|-----|----------------|-----------------|
| 1 | +24V | Brown |
| 2 | n.c. | White |
| 3 | GND | Blue |
| 4 | Active | Black |




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 |
|---|----------|--------------------------|--|--|
|  | 50121919 | SLE46CI-70.K2/ 4P-M12 | Single beam safety device receiver | Response time: 2.5 ms Connection: Connector, M12, Plastic, 4 -pin |

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


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Accessories


Connection technology - Connection unit

| | Part no. | Designation | Article | Description |
|---|----------|-------------|--------------|-------------|
|  | 547958 | MSI-TR1B-01 | Safety relay | |
|  | 547959 | MSI-TR1B-02 | Safety relay | |


Connection technology - Connection cables

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

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 |

Mounting technology - Rod mounts

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

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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, 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 electronic website in the Download tab of the article detailed page.