



Part no.: 50121919  
**SLE46CI-70.K2/4P-M12**  
Single beam safety device receiver



Figure can vary

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## Technical data

| <b>Basic data</b>                   |  |
|-------------------------------------|--|
| Series                              | 46C  |
| <b>Functions</b>                    |  |
| Functions                           | Alignment indicator<br>Diagnostic output   |
| <b>Characteristic parameters</b>    |  |
| 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 <sub>d</sub>                   | 400 years , EN ISO 13849-1   |
| Mission time T <sub>M</sub>         | 20 years , EN ISO 13849-1  |
| Category                            | 2 , EN ISO 13849:2008 , In combination with a suitable test monitoring unit, e.g. MSI-TR1B |
| <b>Electrical data</b>              |  |
| Protective circuit                  | Polarity reversal protection<br>Short circuit protected                                    |
| <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 ... 15 mA  |
| <b>Outputs</b>                      |  |
| Number of digital switching outputs | 2 Piece(s)   |
| <b>Switching outputs</b>            |  |
| Switching voltage high, min.        | 22 V   |
| Switching voltage low, max.         | 2 V  |
| Switching voltage, typ.             | 23 V   |
| Voltage type                        | DC   |
| Switching current, max.             | 100 mA   |
| Switching voltage                   | High: $\geq(U_B-2V)$<br>Low: $\leq 2V$   |
| <b>Switching output 1</b>           |  |
| Assignment                          | Connection 1, pin 2  |
| Switching element                   | Transistor , PNP   |
| Switching principle                 | Dark switching   |
| Function                            | Diagnostic output  |
| <b>Switching output 2</b>           |  |
| Assignment                          | Connection 1, pin 4  |
| Switching element                   | Transistor , PNP   |
| Switching principle                 | Light switching  |
| Function                            | Switching output   |
| <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    | Connector                    |
| Function              | Signal OUT<br>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**

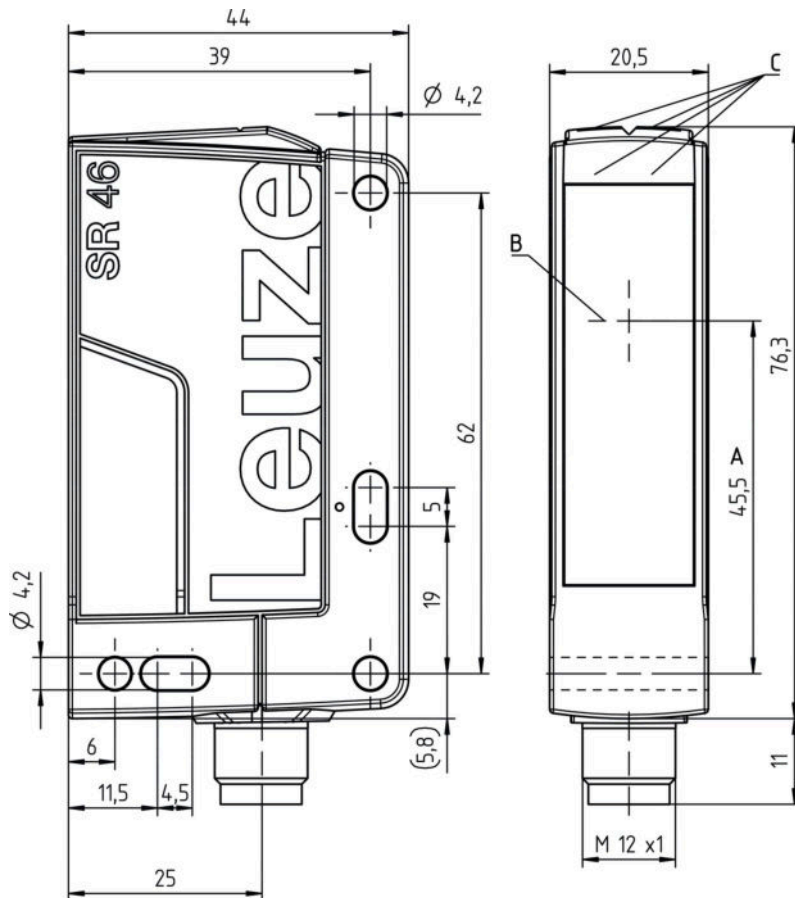
|                      |                                     |
|----------------------|-------------------------------------|
| Degree of protection | IP 67<br>IP 69K                     |
| Protection class     | III , Rating voltage 50 V           |
| Certifications       | c TÜV NRTL US<br>c UL US<br>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

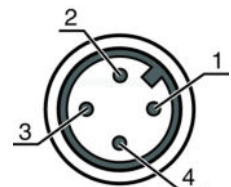


- A Optical axis
- B Transmitter and receiver
- C Green/yellow indicator diodes

## Electrical connection

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

| Pin | Pin assignment |
|-----|----------------|
| 1   | +24V           |
| 2   | Diagnosis      |
| 3   | GND            |
| 4   | OUT            |




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## Operation and display

### LEDs

| LED | Display                  | Meaning         |
|-----|--------------------------|-----------------|
| 1   | Green, continuous light  | Ready           |
| 2   | Yellow, continuous light | Light path free |

## Suitable transmitters

|   | Part no. | Designation        | Article                               | Description   |
|---|----------|--------------------|---------------------------------------|---|
|  | 50121911 | SLS46CI-70.K28-M12 | Single beam safety device transmitter | Operating range: 5 ... 70 m<br>Operating range limit: 5 ... 80 m<br>Light source: LED, Infrared<br>Response time: 2.5 ms<br>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)


- 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 |
|---|----------|-------------|--------------|-------------|
|  | 547958   | MSI-TR1B-01 | Safety relay |             |


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|   | Part no. | Designation | Article      | Description |
|---|----------|-------------|--------------|-------------|
|  | 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<br>Connection 2: Open end<br>Shielded: No<br>Cable length: 5,000 mm<br>Sheathing material: PVC |


**Mounting technology - Mounting brackets**

|   | Part no. | Designation | Article         | Description  |
|---|----------|-------------|-----------------|--|
|  | 50105315 | BT 46       | Mounting device | Design of mounting device: Angle, L-shape<br>Fastening, at system: Through-hole mounting<br>Mounting bracket, at device: Screw type<br>Type of mounting device: Rigid<br>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<br>Design of mounting device: Mounting system<br>Fastening, at system: For 12 mm rod, Sheet-metal mounting<br>Mounting bracket, at device: Screw type<br>Type of mounting device: Turning, 360°, Clampable, Adjustable<br>Material: Metal |

**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<br>Design of mounting device: Mounting system<br>Fastening, at system: For 12 mm rod, Sheet-metal mounting<br>Mounting bracket, at device: Screw type, Suited for M4 screws<br>Type of mounting device: Clampable, Adjustable, Turning, 360°<br>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.