

## Technical data sheet

### Single beam safety device receiver

Part no.: 50126330

SLE46C-70.K4/4P-M12



Figure can vary

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## Technical data

### Basic data

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

### Functions

|           |                     |
|-----------|---------------------|
| Functions | Alignment indicator |
|           | Diagnostic output   |

### 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 <sub>d</sub>           | 900 years, EN ISO 13849-1   |
| Mission time T <sub>M</sub> | 20 years, EN ISO 13849-1  |
| Category                    | 4, EN ISO 13849:2008, In combination with MSI-TRMB safety relay   |

### Electrical data

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

#### Performance data

|                               |   |
|-------------------------------|---|
| 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                                   |

#### Outputs

|                                     |            |
|-------------------------------------|------------|
| Number of digital switching outputs | 2 Piece(s) |
|-------------------------------------|------------|

#### Switching outputs

|                              |   |
|------------------------------|---|
| 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: ≥(U <sub>B</sub> -2V)<br>Low: ≤2V |

#### Switching output 1

|                     |                     |
|---------------------|---------------------|
| Assignment          | Connection 1, pin 2 |
| Switching element   | Transistor, PNP     |
| Switching principle | Dark switching      |
| Function            | Diagnostic output   |

#### Switching output 2

|                     |                     |
|---------------------|---------------------|
| Assignment          | Connection 1, pin 4 |
| Switching element   | Transistor, PNP     |
| Switching principle | Light switching     |
| Function            | Switching output    |

### Timing

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

### Connection

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

#### Connection 1

|                    |                |
|--------------------|----------------|
| Function           | Signal OUT     |
|                    | Voltage supply |
| Type of connection | Connector      |
| 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              | 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

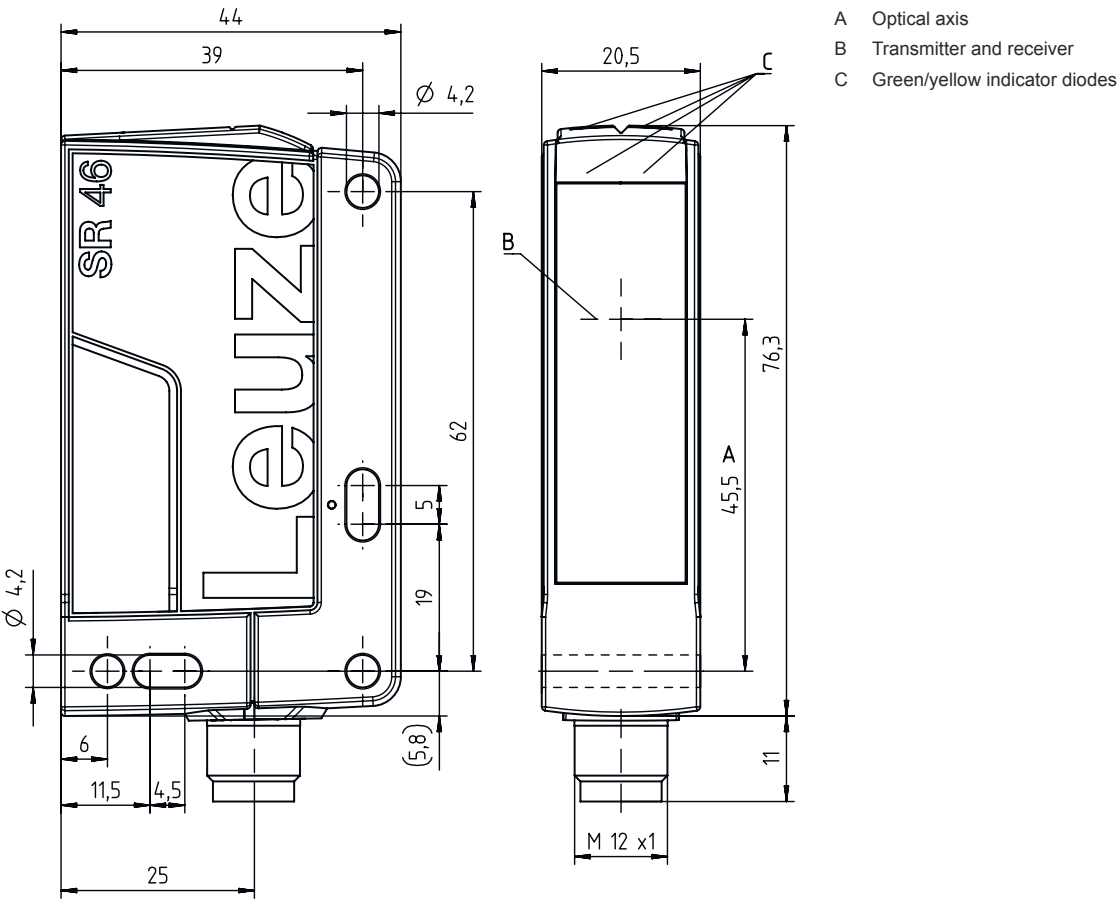
|                      |                             |
|----------------------|-----------------------------|
| Degree of protection | IP 67                       |
|                      | IP 69K                      |
| Protection class     | III                         |
| Certifications       | c TÜV NRTL US               |
|                      | c UL US                     |
| 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

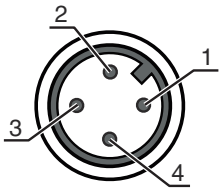


Electrical connection

Connection 1

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


| Pin | Pin assignment | Conductor color |
|-----|----------------|-----------------|
| 1   | +24V           | Brown           |
| 2   | Diagnosis      | White           |
| 3   | GND            | Blue            |
| 4   | OUT            | Black           |





## Operation and display


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


## Suitable transmitters

|   | Part no. | Designation       | Article                               | Description  |
|---|----------|-------------------|---------------------------------------|--|
|  | 50126548 | SLS46C-70.K48-M12 | Single beam safety device transmitter | Special design: Activation input<br>Operating range: 5 ... 70 m<br>Operating range limit: 5 ... 80 m<br>Light source: LED, Red<br>Response time: 2.5 ms<br>Connection: Connector, M12, Plastic, 4 -pin |

## Notes

|  <b>Observe intended use!</b> |   |
|--|---|
|                                | <ul style="list-style-type: none"> <li>The product may only be put into operation by competent persons.</li> <li>Only use the product in accordance with its intended use.</li> </ul> |

| <b>ATTENTION!</b>  |   |
|--|---|
|  | <ul style="list-style-type: none"> <li>The SLS46CK4 safety sensors are a type 4 AOPD only in combination with the MSI-TRM safety relays.</li> <li>For mounting, electrical connection and operation, the operating instructions of the MSI-TRM safety relays are to be observed.</li> </ul> |

| <b>For UL applications:</b>  |   |
|--|---|
|  | <ul style="list-style-type: none"> <li>Certification: UL 508, C22.2 No.14-13</li> <li>Only for use in "class 2" circuits</li> <li>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)</li> </ul> |

## Further information


- 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 |             |


### 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 |

### Muting - Mounting systems

|   | Part no. | Designation  | Article         | Description  |
|---|----------|--------------|-----------------|--|
|  | 50117252 | BTU 300M-D12 | Mounting system | 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 |

Accessories

| Note   |  |
|--|--|
|  | <p>A list with all available accessories can be found on the Leuze website in the Download tab of the article detailed page.</p> |