

Technical data sheet Single beam safety device receiver

Part no.: 50126334 SLE46CI-70.K4/4P-M12



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We reserve the right to make technical changes eng • 2020-12-23

Technical data

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Rasic data

| Series | 46C | | |
|--|---|--|--|
| | | | |
| Functions | | | |
| Functions | Alignment indicator | | |
| | Diagnostic output | | |
| Characteristic parameters | | | |
| Туре | 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 | | |
| Electrical data | | | |
| Protective circuit | Polarity reversal protection | | |
| | Short circuit protected | | |
| | | | |
| Performance data | 24 V DC 20 20 V lost residual | | |
| Supply voltage U _B | 24 V, DC, -20 20 %, Incl. residual ripple | | |
| Residual ripple | 10 %, From U _B | | |
| Open-circuit current | 0 15 mA | | |
| | | | |
| Outputs Number of digital switching outputs | 2 Piece(s) | | |
| | 2 | | |
| 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 _B -2V) | | |
| | 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 | | |

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

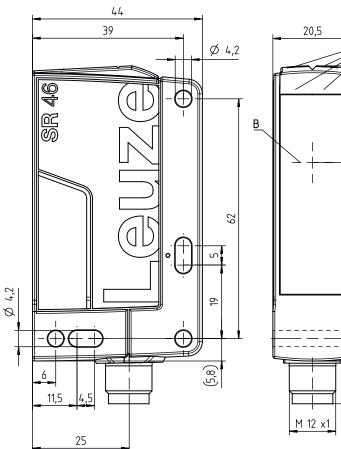
Connection

| 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 |
| Plastic housing | 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 | |
| Environmental data Ambient temperature, operation | -30 60 °C |
| | -30 60 °C -30 70 °C |
| Ambient temperature, operation | |
| Ambient temperature, operation Ambient temperature, storage Certifications | |
| Ambient temperature, operation Ambient temperature, storage | -30 70 °C IP 67 |
| Ambient temperature, operation Ambient temperature, storage Certifications Degree of protection | -30 70 °С IP 67 IP 69К |
| Ambient temperature, operation Ambient temperature, storage Certifications Degree of protection Protection class | -30 70 °C IP 67 IP 69K III, Rating voltage 50 V |
| Ambient temperature, operation Ambient temperature, storage Certifications Degree of protection | -30 70 °C IP 67 IP 69K III, Rating voltage 50 V c TÜV NRTL US |
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| Ambient temperature, operation Ambient temperature, storage Certifications Degree of protection Protection class Certifications Standards applied Classification | -30 70 °C IP 67 IP 69K III, Rating voltage 50 V c TÜV NRTL US c UL US IEC 60947-5-2, IEC/EN 61496 |
| Ambient temperature, operation Ambient temperature, storage Certifications Degree of protection Protection class Certifications Standards applied Classification Customs tariff number | -30 70 °C IP 67 IP 69K III, Rating voltage 50 V c TÜV NRTL US c UL US IEC 60947-5-2, IEC/EN 61496 85365019 |
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Dimensioned drawings

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All dimensions in millimeters



- 76,3 А 45,5 Ţ
- А Optical axis
- В Transmitter and receiver
- С Green/yellow indicator diodes

Electrical connection

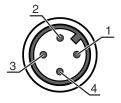
Connection 1

| Function | Signal OUT |
|--------------------|----------------|
| | Voltage supply |
| Type of connection | Connector |
| Thread size | M12 |
| Туре | 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 |
|--------------|------------------------|---------------------------------------|--|
| 50126552 | SLS46CI-70.K48- M12 | Single beam safety device transmitter | Special version: Activation input Operating range: 5 70 m Operating range limit: 5 80 m Light source: LED, Infrared Response time: 2.5 ms Connection: Connector, M12, Plastic, 4 -pin |

Notes

| Observe intended use! |
|---|
| ^t The product may only be put into operation by competent persons. ^t 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.
- b For mounting, electrical connection and operation, the operating instructions of the MSI-TRM safety relays are to be observed.

For UL applications:

- ♦ Certification: UL 508, C22.2 No.14-13
- $\ensuremath{\circledast}$ 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

Light source: Average life expectancy 100,000 h at an ambient temperature of 25 °C

Accessories

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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 Connection 2: Open end Shielded: No Cable length: 5,000 mm Sheathing material: PVC |

Mounting technology - Mounting brackets

| | Part no. | Designation | Article | Description |
|-----|----------|-------------|-----------------|--|
| 513 | 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 |

Muting - Mounting systems

| Part no. | Designation | Article | Description |
|--------------|--------------|-----------------|--|
| 50117252 | BTU 300M-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, Suited for M4 screws Type of mounting device: Clampable, Adjustable, Turning, 360° Material: Metal |

Accessories





♦ A list with all available accessories can be found on the Leuze website in the Download tab of the article detailed page.