Leuze electronic

the sensor people





Part no.: 50121917 SLE46C-40.K2/4P-M12 Single beam safety device receiver















Figure can vary

Contents

- Technical data
- Suitable transmitters
- Dimensioned drawings
- Electrical connection
- Operation and display
- Accessories
- Notes





Technical data

| Basic data | | | |
|-------------------------------------|---|--|--|
| Series | 46C | | |
| 561166 | 100 | | |
| | | | |
| Functions Functions | Alignment indicator | | |
| -unctions | Alignment indicator Diagnostic output | | |
| | | | |
| Characteristic parameters | | | |
| Гуре | 2, IEC/EN 61496 | | |
| Performance Level (PL) | c, EN ISO 13849-1:2008, In combination with MSI-TRMB-01 or MSI-TRMB-02 safety relay | | |
| MTTF _d | 400 years, EN ISO 13849-1 | | |
| Mission time T _M | 20 years, EN ISO 13849-1 | | |
| Category | 2, EN ISO 13849:2008, In combination with MSI-TRMB-01 or MSI-TRMB-02 safety relay | | |
| Electrical data | | | |
| Protective circuit | Polarity reversal protection Short circuit protected | | |
| Performance data | | | |
| Supply voltage | 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) | | |
| 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 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 | | | |
| | | | |



| Connection 1 | | |
|--------------------|------------------------------|--|
| Type of connection | Connector | |
| Function | Voltage supply Signal OUT | |
| 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 | Plastic, PC-PBT | | |
| Lens cover material | Plastic / PMMA | 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 69K IP 67 | |
| Protection class | III, Rating voltage 50 V | |
| Certifications | c UL US c TÜV NRTL US TÜV Süd | |
| Standards applied | IEC 60947-5-2, IEC/EN 61496 | |

| Classification | |
|----------------|----------|
| eCl@ss 8.0 | 27272701 |
| eCl@ss 9.0 | 27272701 |
| ETIM 5.0 | EC001831 |

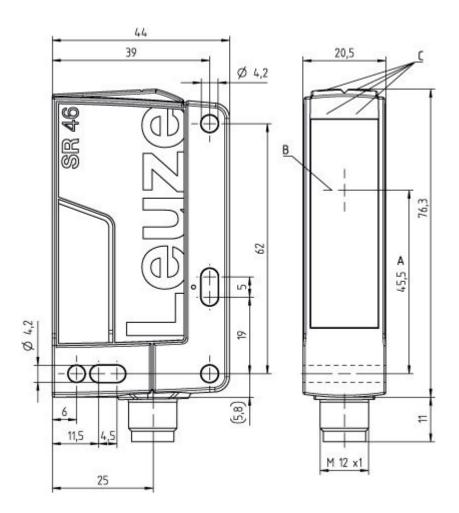
Suitable transmitters

| | Part no. | Designation | Article | Description |
|--|----------|-------------------|---|--|
| The state of the s | 50121909 | SLS46C-40.K28-M12 | Single beam safety device transmitter | Operating range: 0.5 40 m Operating range limit: 0.5 48 m Light source: LED, Red Response time: 2.5 ms Connection: Connector, M12, Plastic, 4 -pin |



Dimensioned drawings

All dimensions in millimeters



A Optical axis

B Transmitter and receiver

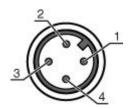
C Green/yellow indicator diodes

Electrical connection

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



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



Operation and display

LEDs

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

Accessories

Connection technology - Connection cables

| Part no. | Designation | Article | Description |
|----------|------------------------|------------------|---|
| 50130654 | KD U-M12-4A- P1-020 | Connection cable | Connection 1: Connector, M12, Axial, Female, A-coded, 4 -pin Connection 2: Open end Shielded: No Cable length: 2,000 mm Sheathing material: PUR |
| 50130657 | KD U-M12-4A- P1-050 | Connection cable | Connection 1: Connector, M12, Axial, Female, A-coded, 4 -pin Connection 2: Open end Shielded: No Cable length: 5,000 mm Sheathing material: PUR |
| 50130658 | KD U-M12-4A- P1-100 | Connection cable | Connection 1: Connector, M12, Axial, Female, A-coded, 4 -pin Connection 2: Open end Shielded: No Cable length: 10,000 mm Sheathing material: PUR |
| 50130648 | KD U-M12-4A- V1-020 | Connection cable | Connection 1: Connector, M12, Axial, Female, A-coded, 4 -pin Connection 2: Open end Shielded: No Cable length: 2,000 mm Sheathing material: PVC |
| 50130652 | KD U-M12-4A- V1-050 | Connection cable | Connection 1: Connector, M12, Axial, Female, A-coded, 4 -pin Connection 2: Open end Shielded: No Cable length: 5,000 mm Sheathing material: PVC |



| Part no. | Designation | Article | Description |
|----------|------------------------|------------------|---|
| 50130653 | KD U-M12-4A- V1-100 | Connection cable | Connection 1: Connector, M12, Axial, Female, A-coded, 4 -pin Connection 2: Open end Shielded: No Cable length: 10,000 mm Sheathing material: PVC |
| 50132431 | KD U-M12-4A- V1-200 | Connection cable | Connection 1: Connector, M12, Axial, Female, A-coded, 4 -pin Connection 2: Open end Shielded: No Cable length: 20,000 mm Sheathing material: PVC |
| 50132430 | KD U-M12-4A- V1-300 | Connection cable | Connection 1: Connector, M12, Axial, Female, A-coded, 4 -pin Connection 2: Open end Shielded: No Cable length: 30,000 mm Sheathing material: PVC |
| 50130692 | KD U-M12-4W- P1-020 | Connection cable | Connection 1: Connector, M12, Angled, Female, A-coded, 4 -pin Connection 2: Open end Shielded: No Cable length: 2,000 mm Sheathing material: PUR |
| 50130694 | KD U-M12-4W- P1-050 | 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: PUR |
| 50130695 | KD U-M12-4W- P1-100 | Connection cable | Connection 1: Connector, M12, Angled, Female, A-coded, 4 -pin Connection 2: Open end Shielded: No Cable length: 10,000 mm Sheathing material: PUR |
| 50130688 | KD U-M12-4W- V1-020 | Connection cable | Connection 1: Connector, M12, Angled, Female, A-coded, 4 -pin Connection 2: Open end Shielded: No Cable length: 2,000 mm Sheathing material: PVC |
| 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 |
| 50130691 | KD U-M12-4W- V1-100 | Connection cable | Connection 1: Connector, M12, Angled, Female, A-coded, 4 -pin Connection 2: Open end Shielded: No Cable length: 10,000 mm Sheathing material: PVC |
| 50132641 | KD U-M12-4W- V1-200 | Connection cable | Connection 1: Connector, M12, Angled, Female, A-coded, 4 -pin Connection 2: Open end Shielded: No Cable length: 20,000 mm Sheathing material: PVC |



Mounting technology - Mounting brackets

| Part no. | Designation | Article | Description |
|----------|-------------|------------------|--|
| 50118543 | BT 300M.5 | Mounting bracket | Design of mounting device: Angle, L-shape Mounting bracket, at system: Through-hole mounting Mounting bracket, at device: Screw type Type of mounting device: Adjustable Material: Stainless steel |
| 50105315 | BT 46 | Mounting device | Design of mounting device: Angle, L-shape Mounting bracket, 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 |
|----------|----------------|-----------------|---|
| 50117253 | BTU 300M-D10 | Mounting system | Contains: 2x M4 x 25 screw, 2x M4 x 20 screw, 4x position washers Design of mounting device: Mounting system Mounting bracket, at system: For 10 mm rod, Sheet-metal mounting Mounting bracket, at device: Screw type Type of mounting device: Clampable, Adjustable, Turning, 360° Material: Metal |
| 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 Mounting bracket, at system: For 12 mm rod, Sheet-metal mounting Mounting bracket, at device: Screw type Type of mounting device: Clampable, Adjustable, Turning, 360° Material: Metal |
| 50117251 | BTU 300M-D14 | Mounting system | Contains: 2x M4 x 25 screw, 2x M4 x 20 screw, 4x position washers Design of mounting device: Mounting system Mounting bracket, at system: For 14 mm rod, Sheet-metal mounting Mounting bracket, at device: Screw type Type of mounting device: Clampable, Adjustable, Turning, 360° Material: Metal |
| 50120425 | BTU 300M.5-D12 | Mounting system | Contains: 2x M4 x 25 screw, 2x M4 x 20 screw, 2x position washers, 2x M4 mounting nut Design of mounting device: Mounting system Mounting bracket, at system: For 12 mm rod, Sheet-metal mounting Mounting bracket, at device: Screw type Type of mounting device: Clampable, Adjustable, Turning, 360° Material: Stainless steel |
| 50122797 | BTU 346M-D12 | Mounting system | Contains: 2x M4 x 25 screw, 2x position washers Design of mounting device: Mounting system Mounting bracket, 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 |
| 50122798 | BTU 346M.5-D12 | Mounting system | Design of mounting device: Mounting system Mounting bracket, at system: For 12 mm rod, Sheet-metal mounting Mounting bracket, at device: Screw type Type of mounting device: Turning, 360°, Clampable, Adjustable Material: Stainless steel |



| | Part no. | Designation | Article | Description |
|-----|----------|--------------|-----------------|--|
| (Te | 50119332 | BTU 900M-D10 | Mounting system | Contains: 2x M4 x 10 screw, 2x position washers Design of mounting device: Mounting system Mounting bracket, at system: For 10 mm rod, Sheet-metal mounting Mounting bracket, at device: Screw type Type of mounting device: Clampable, Turning, 360°, Swiveling Material: Metal |
| T: | 50119331 | BTU 900M-D12 | Mounting system | Contains: 2x position washers, 2x M4 x 10 screw Design of mounting device: Mounting system Mounting bracket, at system: For 12 mm rod, Sheet-metal mounting Mounting bracket, at device: Screw type Type of mounting device: Clampable, Turning, 360°, Swiveling Material: Metal |
| T: | 50119330 | BTU 900M-D14 | Mounting system | Contains: 2x position washers, 2x M4 x 10 screw Design of mounting device: Mounting system Mounting bracket, at system: For 14 mm rod, Sheet-metal mounting Mounting bracket, at device: Screw type Type of mounting device: Clampable, Turning, 360°, Swiveling Material: Metal |

Mounting technology - Other

| F | Part no. | Designation | Article | Description |
|----|----------|-------------|---------|--|
| 50 | 0136665 | BTX 046M | 0.1 | Contains: 2x M4 x 30 screw, 1 M4 x 12 screw Design of mounting device: Mounting plate Mounting bracket, at system: Through-hole mounting Mounting bracket, at device: Screw type Material: Metal |

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