

the sensor people





Part no.: 50126332 SLE46CI-40.K4/4P-M12 Single beam safety device receiver













Figure can vary

# Contents

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





### **Technical data**

Basic data	
Series	46C
Characteristic parameters	
Туре	4, IEC/EN 61496
Performance Level (PL)	e, EN ISO 13849-1:2008, In combination with MSI-TRMB-01 or MSI-TRMB-02 safety relay
MTTFd	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-01 or MSI-TRMB-02 safety relay
Timing	
Switching frequency	250 Hz
Response time	2.5 ms
Readiness delay	300 ms
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 <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 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
Connection	
Number of connections	1 Piece(s)



Connection 1	
Type of connection	Connector
Function	Signal OUT, Voltage supply
Thread size	M12
Material	Plastic
No. of pins	4 -pin
Mechanical data	
Design	Cubic
Width	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
Operation and display	
Type of display	LED
Number of LEDs	2 Piece(s)
Farring a manufact at the	
Environmental data	-30 60 °C
Ambient temperature, operation	-30 70 °C
Ambient temperature, storage	
Environmental test	ECOLAB
Certifications	
Degree of protection	IP 67, IP 69K

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

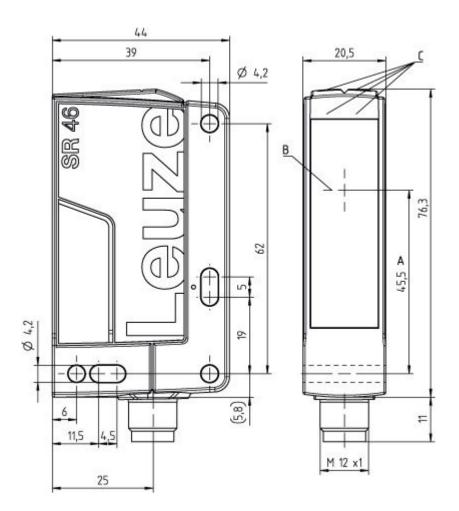
runctions	
Functions	Diagnostic output, Alignment indicator
Classification	

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

## **Dimensioned drawings**

All dimensions in millimeters



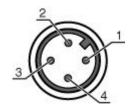


- A B C Optical axis
- Transmitter and receiver
  Green/yellow indicator diodes

### **Electrical connection**

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

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





### 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
50104565	K-D M12A-4P-10m- PUR	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
50104546	K-D M12A-4P-10m- PVC	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
50104753	K-D M12A-4P-20m- PVC	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
50104561	K-D M12A-4P-2m- PUR	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
50104542	K-D M12A-4P-2m- PVC	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
50123532	K-D M12A-4P-30m- PVC	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
50104563	K-D M12A-4P-5m- PUR	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



Part no.	Designation	Article	Description
50104544	K-D M12A-4P-5m- PVC	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
50104566	K-D M12W-4P-10m- PUR	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
50104547	K-D M12W-4P-10m- PVC	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
50113473	K-D M12W-4P-20M- PVC	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
50104562	K-D M12W-4P-2m- PUR	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
50104543	K-D M12W-4P-2m- PVC	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
50104564	K-D M12W-4P-5m- PUR	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
50104545	K-D M12W-4P-5m- PVC	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
(F) 3-	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
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
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
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

### **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.



#### Attention!

- The SLS46CK4 safety sensors are a type 4 AOPD only in combination with the MSI-TRM safety relays.
- · 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
- 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)
- Average life expectancy 100,000 h at an ambient temperature of 25 °C