## SMART SENSOR BUSINESS

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Part no.: 50126334 SLE46CI-70.K4/4P-M12 Single beam safety device receiver



Figure can vary

# Contents

- Technical data
- · Dimensioned drawings
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- · Operation and display
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- Notes
- Accessories

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### Part no.: 50126334 – SLE46CI-70.K4/4P-M12 – Single beam safety device

### **Technical data**

asic data			
eries	46C		
Functions			
unctions	Alignment indicator Diagnostic output		
Characteristic parameters			
Гуре	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		
erformance Level (PL)	e , EN ISO 13849-1:2008 , In combination with MSI-TRMB safety re lay		
1TTF <sub>d</sub>	900 years , EN ISO 13849-1		
/ission time T <sub>M</sub>	20 years , EN ISO 13849-1		
Category	4, EN ISO 13849:2008, In combination with MSI-TRMB safety rela		
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		
Out it also as a literation of the	23 V		
Switching voltage, typ.	23 V		
Switching voltage, typ. Voltage type	23 V DC		
Voltage type Switching current, max.	DC 100 mA		
Voltage type	DC		
Voltage type Switching current, max.	DC 100 mA High: ≥(U <sub>B</sub> -2V)		
Voltage type Switching current, max. Switching voltage	DC 100 mA High: ≥(U <sub>B</sub> -2V)		
Voltage type Switching current, max. Switching voltage Switching output 1 Assignment Switching element	DC 100 mA High: ≥(U <sub>B</sub> -2V) Low: ≤2V Connection 1, pin 2 Transistor , PNP		
Voltage type Switching current, max. Switching voltage Switching output 1 Assignment Switching element Switching principle	DC 100 mA High: ≥(U <sub>B</sub> -2V) Low: ≤2V Connection 1, pin 2 Transistor , PNP Dark switching		
Voltage type Switching current, max. Switching voltage Switching output 1 Assignment Switching element	DC 100 mA High: ≥(U <sub>B</sub> -2V) Low: ≤2V Connection 1, pin 2 Transistor , PNP		
Voltage type Switching current, max. Switching voltage Switching output 1 Assignment Switching element Switching principle Function Switching output 2	DC 100 mA High: ≥(U <sub>B</sub> -2V) Low: ≤2V Connection 1, pin 2 Transistor , PNP Dark switching Diagnostic output		
Voltage type Switching current, max. Switching voltage Switching output 1 Assignment Switching element Switching principle Function Switching output 2 Assignment	DC 100 mA High: ≥(U <sub>B</sub> -2V) Low: ≤2V Connection 1, pin 2 Transistor , PNP Dark switching Diagnostic output Connection 1, pin 4		
Voltage type Switching current, max. Switching voltage Switching output 1 Assignment Switching element Switching principle Function Switching output 2 Assignment Switching element	DC 100 mA High: ≥(U <sub>B</sub> -2V) Low: ≤2V Connection 1, pin 2 Transistor , PNP Dark switching Diagnostic output Connection 1, pin 4 Transistor , PNP		
Voltage type Switching current, max. Switching voltage Switching output 1 Assignment Switching element Switching principle Function Switching output 2 Assignment Switching element Switching principle	DC 100 mA High: ≥(UB-2V) Low: ≤2V Connection 1, pin 2 Transistor , PNP Dark switching Diagnostic output Connection 1, pin 4 Transistor , PNP Light switching		
Voltage type Switching current, max. Switching voltage Switching output 1 Assignment Switching element Switching principle Function Switching output 2 Assignment Switching element	DC 100 mA High: ≥(U <sub>B</sub> -2V) Low: ≤2V Connection 1, pin 2 Transistor , PNP Dark switching Diagnostic output Connection 1, pin 4 Transistor , PNP		
Voltage type         Switching current, max.         Switching voltage         Switching output 1         Assignment         Switching element         Switching principle         Function         Switching output 2         Assignment         Switching element         Switching output 2         Assignment         Switching principle         Function	DC 100 mA High: ≥(U <sub>B</sub> -2V) Low: ≤2V Connection 1, pin 2 Transistor , PNP Dark switching Diagnostic output Connection 1, pin 4 Transistor , PNP Light switching Switching output		
Voltage type         Switching current, max.         Switching voltage         Switching output 1         Assignment         Switching element         Switching principle         Function         Switching element         Switching output 2         Assignment         Switching element         Switching element         Switching element         Switching reprinciple         Function         Timing         Switching frequency	DC         100 mA         High: ≥(UB-2V)         Low: ≤2V         Connection 1, pin 2         Transistor , PNP         Dark switching         Diagnostic output         Connection 1, pin 4         Transistor , PNP         Light switching		
Voltage type Switching current, max. Switching voltage Switching output 1 Assignment Switching element Switching principle Function Switching output 2 Assignment Switching element Switching principle	DC         100 mA         High: ≥(UB-2V)         Low: ≤2V         Connection 1, pin 2         Transistor , PNP         Dark switching         Diagnostic output         Connection 1, pin 4         Transistor , PNP         Light switching         Switching output		

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## Part no.: 50126334 – SLE46CI-70.K4/4P-M12 – Single beam safety device

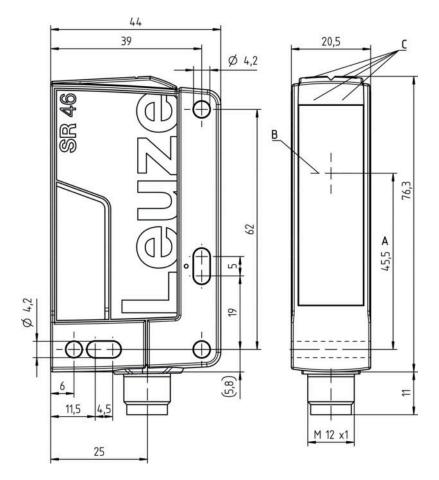
Connection			
Number of connections	1 Piece(s)		
Connection 1			
Type of connection	Connector		
Function	Signal OUT Voltage supply		
Thread size	M12		
Material	Plastic		
No. of pins	4 -pin		
Mechanical data			
Design	Cubic		
Dimension (W x H x L)	20.5 mm x 76.3 mm x 44 mm		
Housing material	Plastic , 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		
Degree of protection Protection class Certifications	IP 69K		
Protection class	IP 69K III , Rating voltage 50 V c TÜV NRTL US		
Protection class Certifications	IP 69K III , Rating voltage 50 V c TÜV NRTL US c UL US		
Protection class Certifications Standards applied Classification	IP 69K III , Rating voltage 50 V c TÜV NRTL US c UL US		
Protection class Certifications Standards applied	IP 69K III , Rating voltage 50 V c TÜV NRTL US c UL US IEC 60947-5-2, IEC/EN 61496		
Protection class Certifications Standards applied Classification Customs tariff number eCl@ss 8.0	IP 69K           III , Rating voltage 50 V           c TÜV NRTL US           c UL US           IEC 60947-5-2, IEC/EN 61496           85365019		
Protection class Certifications Standards applied Classification Customs tariff number	IP 69K         III , Rating voltage 50 V         c TÜV NRTL US         c UL US         IEC 60947-5-2, IEC/EN 61496         85365019         27272701		

### **Dimensioned drawings**

All dimensions in millimeters

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Part no.: 50126334 - SLE46CI-70.K4/4P-M12 - Single beam safety device



A Optical axis

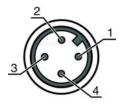
B Transmitter and receiver

C 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

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



### Part no.: 50126334 - SLE46CI-70.K4/4P-M12 - Single beam safety device

#### **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
50	0126552		safety device transmitter	Special design: 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!

- 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)
- 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
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 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
E13	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	Contains: 2x M4 x 25 screw, 2x M4 x 20 screw, 4x position washers 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

Note

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