

Technical data sheet Single light beam safety device receiver

Part no.: 50126331 SLE46CI-40.K4/4P



Contents

- Technical data
- Dimensioned drawings
- Electrical connection
- Operation and display
- Suitable transmitters
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Series	46C
Functions	
Functions	Alignment indicator
runctions	Alignment indicator Diagnostic output
	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	041/ DO 00 000/ last assist at
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	0 Bio (-)
Number of digital switching outputs	2 Piece(s)
Switching outputs	
Switching voltage high, min.	22 V
	22 V 2 V
Switching voltage high, min.	
Switching voltage high, min. Switching voltage low, max.	2 V
Switching voltage high, min. Switching voltage low, max. Switching voltage, type. Voltage type Switching current, max.	2 V 23 V DC 100 mA
Switching voltage high, min. Switching voltage low, max. Switching voltage, type. Voltage type	2 V 23 V DC 100 mA high: ≥(U _B -2V)
Switching voltage high, min. Switching voltage low, max. Switching voltage, type. Voltage type Switching current, max.	2 V 23 V DC 100 mA
Switching voltage high, min. Switching voltage low, max. Switching voltage, type. Voltage type Switching current, max. Switching voltage	2 V 23 V DC 100 mA high: ≥(U _B -2V)
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Switching voltage high, min. Switching voltage low, max. Switching voltage, type. Voltage type Switching current, max. Switching voltage Switching voltage	2 V 23 V DC 100 mA high: ≥(U _B -2V) low: ≤ 2 V
Switching voltage high, min. Switching voltage low, max. Switching voltage, type. Voltage type Switching current, max. Switching voltage Switching output 1 Assignment	2 V 23 V DC 100 mA high: \geq (U _B -2V) low: \leq 2 V Connection 1, conductor 2
Switching voltage high, min. Switching voltage low, max. Switching voltage, type. Voltage type Switching current, max. Switching voltage Switching output 1 Assignment Switching element	2 V 23 V DC 100 mA high: ≥(U _B -2V) low: ≤ 2 V Connection 1, conductor 2 Transistor, PNP
Switching voltage high, min. Switching voltage low, max. Switching voltage, type. Voltage type Switching current, max. Switching voltage Switching output 1 Assignment Switching element Switching principle Function	2 V 23 V DC 100 mA high: ≥(U _B -2V) low: ≤ 2 V Connection 1, conductor 2 Transistor, PNP Dark switching
Switching voltage high, min. Switching voltage low, max. Switching voltage, type. Voltage type Switching current, max. Switching voltage Switching output 1 Assignment Switching element Switching principle	2 V 23 V DC 100 mA high: ≥(U _B -2V) low: ≤ 2 V Connection 1, conductor 2 Transistor, PNP Dark switching
Switching voltage high, min. Switching voltage low, max. Switching voltage, type. Voltage type Switching current, max. Switching voltage Switching output 1 Assignment Switching element Switching principle Function Switching output 2	2 V 23 V DC 100 mA high: ≥(U _B -2V) low: ≤ 2 V Connection 1, conductor 2 Transistor, PNP Dark switching Diagnostic output
Switching voltage high, min. Switching voltage low, max. Switching voltage, type. Voltage type Switching current, max. Switching voltage Switching output 1 Assignment Switching element Switching principle Function Switching output 2 Assignment	2 V 23 V DC 100 mA high: ≥(U _B -2V) low: ≤ 2 V Connection 1, conductor 2 Transistor, PNP Dark switching Diagnostic output Connection 1, conductor 4
Switching voltage high, min. Switching voltage low, max. Switching voltage, type. Voltage type Switching current, max. Switching voltage Switching output 1 Assignment Switching element Switching principle Function Switching output 2 Assignment Switching element	2 V 23 V DC 100 mA high: ≥(U _B -2V) low: ≤ 2 V Connection 1, conductor 2 Transistor, PNP Dark switching Diagnostic output Connection 1, conductor 4 Transistor, PNP
Switching voltage high, min. Switching voltage low, max. Switching voltage, type. Voltage type Switching current, max. Switching voltage Switching output 1 Assignment Switching element Switching principle Function Switching output 2 Assignment Switching element Switching element Switching principle	2 V 23 V DC 100 mA high: ≥(U _B -2V) low: ≤ 2 V Connection 1, conductor 2 Transistor, PNP Dark switching Diagnostic output Connection 1, conductor 4 Transistor, PNP Light switching
Switching voltage high, min. Switching voltage low, max. Switching voltage, type. Voltage type Switching current, max. Switching voltage Switching output 1 Assignment Switching element Switching principle Function Switching output 2 Assignment Switching element Switching element Switching principle Function Time behavior	2 V 23 V DC 100 mA high: ≥(U _B -2V) low: ≤ 2 V Connection 1, conductor 2 Transistor, PNP Dark switching Diagnostic output Connection 1, conductor 4 Transistor, PNP Light switching
Switching voltage high, min. Switching voltage low, max. Switching voltage, type. Voltage type Switching current, max. Switching output 1 Assignment Switching element Switching principle Function Switching output 2 Assignment Switching element Switching element Switching principle Function Switching principle Function Switching principle Function	2 V 23 V DC 100 mA high: ≥(U _B -2V) low: ≤ 2 V Connection 1, conductor 2 Transistor, PNP Dark switching Diagnostic output Connection 1, conductor 4 Transistor, PNP Light switching Switching output

Connection	
Number of connections	1 Piece(s)
Connection 1	
Function	Signal OUT
	Voltage supply
Type of connection	Cable
Cable length	2,000 mm
Sheathing material	PUR
Number of conductors	4 -wire
Wire cross section	0.21 mm ²
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	100 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, Rating voltage 50 V
Approvals	c TÜV NRTL US
	c UL US
Standards applied	IEC 60947-5-2, IEC/EN 61496
Classification	
Customs tariff number	85365019
ECLASS 5.1.4	27272701
ECLASS 8.0	27272701
ECLASS 9.0	27272701
ECLASS 10.0	27272701
ECLASS 11.0	27272701
ECLASS 12.0	27272701
ECLASS 13.0	27272701
ECLASS 14.0	27272701
ECLASS 15.0	27272701
ETIM 5.0	EC001831
ETIM 6.0	EC001831
ETIM 7.0	EC001831

EC001831

EC001831

EC001831

EC001831

ETIM 7.0

ETIM 8.0

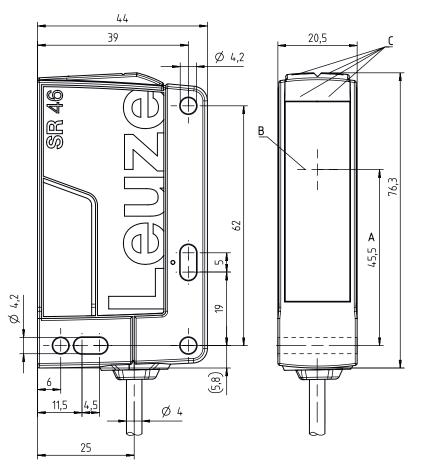
ETIM 9.0

ETIM 10.0

Dimensioned drawings

Leuze

All dimensions in millimeters



- Optical axis
- В Transmitter and receiver
- Green/yellow indicator diodes

Electrical connection

Connection 1

Function	Signal OUT
	Voltage supply
Type of connection	Cable
Cable length	2,000 mm
Sheathing material	PUR
Cable color	Black
Number of conductors	4 -wire
Wire cross section	0.21 mm²

Conductor color

Conductor assignment

Brown	+24 V
White	Diagnosis
Blue	GND
Black	OUT

Operation and display

LED	Display	Meaning
1	Green continuous light	Ready

Operation and display



LED	Display	Meaning
2	Yellow, continuous light	Light path free

Suitable transmitters

	Part no.	Designation	Article	Description
No. of Contract of	50126549	SLS46CI-40.K48	Single light beam safety device transmitter	Special version: Activation input Operating range: 0.25 40 m Operating range limit: 0.25 48 m Light source: LED, Infrared Response time: 2.5 ms Connection: Cable, 2,000 mm, PUR

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:



- Sertification: 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)

Further information

• 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
The state of the s	547931	MSI-TRMB-01	Safety relay	
***	547932	MSI-TRMB-02	Safety relay	

Mounting technology - Mounting brackets

	Part no.	Designation	Article	Description
£13	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

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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

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Note



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