

Technical data sheet Single beam safety device receiver

Part no.: 50126330 SLE46C-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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Basic 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	
Supply voltage U _B	24 V, DC, -20 20 %, Incl. residual ripple
Residual ripple	10 %, From U _B
Open-circuit current	0 15 mA
Outrasta	
Outputs Number of digital switching outputs	2 Piece(s)
Number of algital switching outputs	211000(3)
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	
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

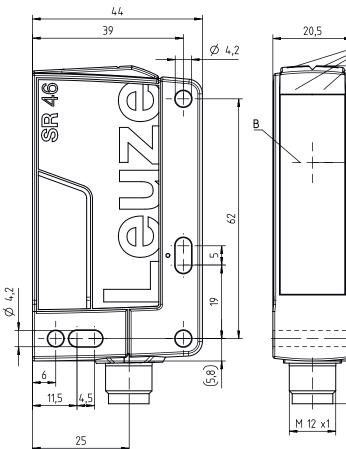
Connection

Connection	
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)
	1 · · · · · · · · · · · · · · · · · · ·
Environmental data	(0)
	-30 60 °C
Environmental data	
Environmental data Ambient temperature, operation	-30 60 °C
Environmental data Ambient temperature, operation Ambient temperature, storage	-30 60 °C
Environmental data Ambient temperature, operation Ambient temperature, storage Certifications	-30 60 °C -30 70 °C
Environmental data Ambient temperature, operation Ambient temperature, storage Certifications	-30 60 °C -30 70 °C IP 67 IP 69K
Environmental data Ambient temperature, operation Ambient temperature, storage Certifications Degree of protection	-30 60 °C -30 70 °C IP 67
Environmental data Ambient temperature, operation Ambient temperature, storage Certifications Degree of protection Protection class	-30 60 °C -30 70 °C IP 67 IP 69K III, Rating voltage 50 V
Environmental data Ambient temperature, operation Ambient temperature, storage Certifications Degree of protection Protection class	-30 60 °C -30 70 °C IP 67 IP 69K III, Rating voltage 50 V c TÜV NRTL US
Environmental data Ambient temperature, operation Ambient temperature, storage Certifications Degree of protection Protection class Certifications	-30 60 °C -30 70 °C IP 67 IP 69K III, Rating voltage 50 V c TÜV NRTL US c UL US
Environmental data Ambient temperature, operation Ambient temperature, storage Certifications Degree of protection Protection class Certifications Standards applied	-30 60 °C -30 70 °C IP 67 IP 69K III, Rating voltage 50 V c TÜV NRTL US c UL US
Environmental data Ambient temperature, operation Ambient temperature, storage Certifications Degree of protection Protection class Certifications Standards applied Classification Customs tariff number	-30 60 °C -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
Environmental data Ambient temperature, operation Ambient temperature, storage Certifications Degree of protection Protection class Certifications Standards applied Classification	-30 60 °C -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
Environmental data Ambient temperature, operation Ambient temperature, storage Certifications Degree of protection Protection class Certifications Standards applied Classification Customs tariff number eCl@ss 5.1.4	-30 60 °C -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 27272701
Environmental data Ambient temperature, operation Ambient temperature, storage Certifications Degree of protection Protection class Certifications Standards applied Classification Customs tariff number eCl@ss 5.1.4 eCl@ss 8.0	-30 60 °C -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 27272701 27272701
Environmental data Ambient temperature, operation Ambient temperature, storage Certifications Degree of protection Protection class Certifications Standards applied Classification Customs tariff number eCl@ss 5.1.4 eCl@ss 8.0 eCl@ss 9.0	-30 60 °C -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 27272701 27272701 27272701
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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

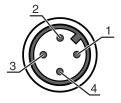
Connection 1

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

.e	U	Ζ	e
.e	U	Ζ	e

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

Suitable transmitters

 Part no.	Designation	Article	Description
50126548	SLS46C-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, Red Response time: 2.5 ms Connection: Connector, M12, Plastic, 4 -pin

Notes

	Observe intended use!
<u>\</u>	 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
- $\ensuremath{\circledast}$ 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
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	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.