

Technical data sheet

Single light beam safety device receiver

Part no.: 50121917

SLE46C-40.K2/4P-M12



For illustration purposes only

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Technical data

Basic data

Series	46C
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Functions

Functions	Alignment indicator
	Diagnostic output

Characteristic parameters

Type	2, IEC/EN 61496, in combination with a suitable test monitoring unit, e.g. MSI-TR1B
SIL	1, IEC 61508, in combination with a suitable test monitoring unit, e.g. MSI-TR1B
SILCL	1, IEC/EN 62061, in combination with a suitable test monitoring unit, e.g. MSI-TR1B
Performance Level (PL)	c, EN ISO 13849-1:2008, In combination with a suitable test monitoring unit, e.g. MSI-TR1B
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 a suitable test monitoring unit, e.g. MSI-TR1B

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

Outputs

Number of digital switching outputs	2 Piece(s)
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Switching outputs

Switching voltage high, min.	22 V
Switching voltage low, max.	2 V
Switching voltage, type.	23 V
Voltage type	DC
Switching current, max.	100 mA
Switching voltage	high: ≥(U _B -2V)
	low: ≤ 2 V

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

Time behavior

Switching frequency	250 Hz
Response time	2.5 ms
Readiness delay	300 ms

Connection

Number of connections	1 Piece(s)
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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	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 67
	IP 69K
Protection class	III, Rating voltage 50V
Approvals	c UL US
Standards applied	IEC 60947-5-2, IEC/EN 61496

Electrical connection

Connection 1

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

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



Operation and display

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

Suitable transmitters

	Part no.	Designation	Article	Description
	50121909	SLS46C-40.K28-M12	Single light 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

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.

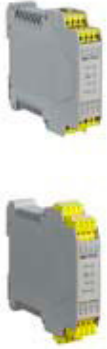
For UL applications:	
	⚡ Certification: UL 508, C22.2 No.14-13 ⚡ Only for use in "class 2" circuits ⚡ These proximity switches shall be used with UL Listed Cable assemblies rated 30V, 0.5A min, in the field installation, or equivalent (categories: CYJV/ CYJV7 or PVVA/PVVA7)

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
	547958	MSI-TR1B-01	Safety relay	
	547959	MSI-TR1B-02	Safety relay	

Connection technology - Connection cables

	Part no.	Designation	Article	Description
	50130690	KD U-M12-4W-V1-050	Connection cable	Application: Chemical resistant Connection 1: Connector, M12, Angled, Female, A-coded, 4 -pin Connector, LED: No Connection 2: Open end Shielded: No Cable length: 5,000 mm Sheathing material: PVC

Mounting technology - Mounting brackets

	Part no.	Designation	Article	Description
	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

Accessories

Mounting technology - Rod mounts

	Part no.	Designation	Article	Description
	50122797	BTU 346M-D12	Mounting system	Contains: 2x M4 x 25 screw, 2x position washers Design of mounting device: Mounting system Fastening, at system: For 12 mm rod, Sheet-metal mounting Mounting bracket, at device: Screw type Type of mounting device: Turning, 360°, Adjustable, Clampable 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 website in the Download tab of the article detailed page.