

the sensor people





Figure can vary

Part no.: 50121908 SLS46C-70.K28 Single beam safety device transmitter













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Technical data

Basic data			
Series	46C		
Characteristic parameters			
Туре	2, IEC/EN 61496		
MTTF _d	400 years, EN ISO 13849-1		
Mission time T _M	20 years, EN ISO 13849-1		
Optical data			
Operating range	5 70 m		
Operating range limit	5 80 m		
Light source	LED, Red		
LED light wavelength	630 nm		
LED protection class	1		
Transmitted-signal shape	Pulsed		
Timing			
Switching frequency	250 Hz		
Response time	2.5 ms		
Readiness delay	300 ms		
Electrical data			
Protective circuit	Short circuit protected, Polarity reversal protection		
Performance data			
Supply voltage	24 V, DC, -20 20 %, Incl. residual ripple		
Residual ripple	10 %, From U _B		
Open-circuit current	0 40 mA		
Inputs			
Number of activation inputs	1 Piece(s)		
Activation inputs			
Voltage type	DC		
Voltage type Switching voltage	low: ≤1.5V, high: ≥8V		
Voltage type Switching voltage Switching voltage high, min.	low: ≤1.5V, high: ≥8V 8 V		
Voltage type Switching voltage Switching voltage high, min. Switching voltage low, max.	low: ≤1.5V, high: ≥8V		
Voltage type Switching voltage Switching voltage high, min. Switching voltage low, max. Activation/disable delay	low: ≤1.5V, high: ≥8V 8 V 1.5 V 1 ms		
Voltage type Switching voltage Switching voltage high, min. Switching voltage low, max.	low: ≤1.5V, high: ≥8V 8 V 1.5 V		
Voltage type Switching voltage Switching voltage high, min. Switching voltage low, max. Activation/disable delay	low: ≤1.5V, high: ≥8V 8 V 1.5 V 1 ms		
Voltage type Switching voltage Switching voltage high, min. Switching voltage low, max. Activation/disable delay Input resistance	low: ≤1.5V, high: ≥8V 8 V 1.5 V 1 ms		
Voltage type Switching voltage Switching voltage high, min. Switching voltage low, max. Activation/disable delay Input resistance Activation input 1	low: ≤1.5V, high: ≥8V 8 V 1.5 V 1 ms 10.000 Ω, -30 30 %		
Voltage type Switching voltage Switching voltage high, min. Switching voltage low, max. Activation/disable delay Input resistance Activation input 1 Assignment	low: ≤1.5V, high: ≥8V 8 V 1.5 V 1 ms 10.000 Ω, -30 30 % Connection 1, conductor 4		
Voltage type Switching voltage Switching voltage high, min. Switching voltage low, max. Activation/disable delay Input resistance Activation input 1 Assignment	low: ≤1.5V, high: ≥8V 8 V 1.5 V 1 ms 10.000 Ω, -30 30 % Connection 1, conductor 4		



Connection 1		
Type of connection	Cable	
Function	Voltage supply, Signal IN	
Cable length	2.000 mm	
Sheathing material	PUR	
Number of conductors	4 -wire	
Core cross section	0.21 mm²	

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	100 g
Housing color	Red
Type of fastening	Through-hole mounting

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	
Environmental test	ECOLAB	

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

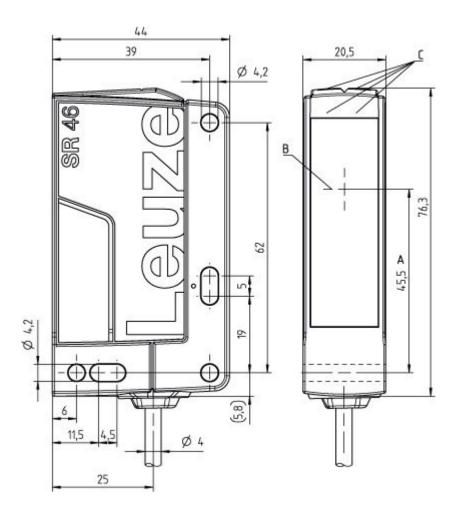
Functions		
Functions	Activation input	

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

Dimensioned drawings

All dimensions in millimeters





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

Electrical connection

Connection 1		
Type of connection	Cable	
Function	Voltage supply, Signal IN	
Cable length	2.000 mm	
Sheathing material	PUR	
Cable color	Black	
Number of conductors	4 -wire	
Core cross section	0.21 mm²	

Conductor color	Conductor assignment
Brown	+24V
White	n.c.
Blue	GND
Black	Active



Operation and display

LEDs

LED	Display	Meaning
1	Green, continuous light	Ready
2	Yellow, continuous light	Transmitter activated

Accessories

Mounting technology - Mounting brackets

Part no.	Designation	Article	Description
50105315	BT 46		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
50122797	BTU 346M-D12	Mounting system	Contains: 2x M4 x 25 screw, 2x 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: Turning, 360°, Clampable, Adjustable Material: Metal



Part no.	Designation	Article	Description
50122798	BTU 346M.5-D12	Mounting system	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: Turning, 360°, Clampable, Adjustable 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

Alignment aids

	Part no.	Designation	Article	Description
50	50109545	SAT 5	Alignment aid	Housing 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.

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)

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- Typ. operating range limit: max. attainable range without function reserve
- Operating range: recommended range with function reserve
- Average life expectancy 100,000 h at an ambient temperature of 25 °C