

Technical data sheet

Single light beam safety device transmitter

Part no.: 50134012

SLS518I-K48-M12

Contents

- Technical data
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- Electrical connection
- Operation and display
- Notes
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For illustration purposes only



Technical data

Basic data

Series	518
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Special version

Special version	Activation input
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Characteristic parameters

Type	4, IEC/EN 61496, in combination with a suitable test monitoring unit, e.g. MSI-TR1B
SIL	3, IEC 61508, in combination with a suitable test monitoring unit, e.g. MSI-TR1B
SILCL	3, IEC/EN 62061, in combination with a suitable test monitoring unit, e.g. MSI-TR1B
Performance Level (PL)	e, EN ISO 13849-1
MTTF _d	1,700 years, EN ISO 13849-1
Mission time T _M	20 years, EN ISO 13849-1
Category	4, EN ISO 13849, In combination with MSI-TRMB safety relay

Optical data

Operating range	0 ... 8 m
Operating range limit	0 ... 8 m
Light source	LED, Infrared
Wavelength	880 nm
Opening angle, max.	-2.5 ... 2.5 °

Electrical data

Protective circuit	Polarity reversal protection Short circuit protected
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Performance data

Supply voltage U _B	24 V, DC, -15 ... 15 %, Incl. residual ripple
Open-circuit current	35 mA

Inputs

Number of activation inputs	1 Piece(s)
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Activation inputs

Voltage type	DC
Switching voltage	high: ≥8V low: ≤ 1.5 V
Switching voltage high, min.	8 V
Switching voltage low, max.	1.5 V
Activation/disable delay	1 ms
Input resistance	10,000 Ω, -30 ... 30 %

Activation input 1

Assignment	Connection 1, pin 4
Active switching state	High

Time behavior

Switching frequency	500 Hz
Response time	1 ms
Readiness delay	300 ms

Connection

Number of connections	1 Piece(s)
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Connection 1

Function	Activation input Voltage supply
Type of connection	Connector
Thread size	M12
Material	Plastic
No. of pins	4 -pin

Mechanical data

Design	Cylindrical
Dimension (Ø x L)	22 mm x 81 mm
Thread size	M18
Housing material	Plastic
Plastic housing	ABS, UL 94-V0
Lens cover material	Plastic / PMMA
Net weight	30 g
Housing color	Black
Type of fastening	Screw type

Operation and display

Type of display	LED
Number of LEDs	1 Piece(s)

Environmental data

Ambient temperature, operation	-25 ... 55 °C
Ambient temperature, storage	-25 ... 70 °C

Certifications

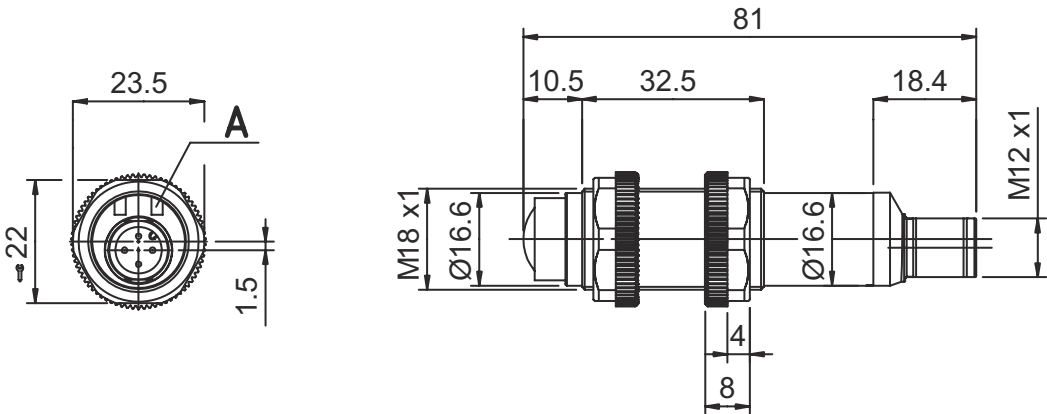
Degree of protection	IP 67
Approvals	TÜV Süd UL US
Standards applied	IEC 60947-5-2, IEC/EN 61496

Classification

Customs tariff number	85365019
ECLASS 8.0	27272701
ECLASS 9.0	27272701
ETIM 5.0	EC001831
ETIM 6.0	EC001831

Dimensioned drawings

All dimensions in millimeters



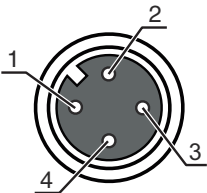
A Green LED

Electrical connection

Connection 1

Function	Activation input
	Voltage supply
Type of connection	Connector
Thread size	M12
Type	Female
Material	Plastic
No. of pins	4 -pin
Encoding	A-coded

Pin	Pin assignment	Conductor color
1	+24 V	Brown
2	n.c.	White
3	GND	Blue
4	Active	Black



Operation and display

LED	Display	Meaning
1	Green, continuous light	Ready

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.

Notes

For UL applications:	
	⚡ Only for use in "class 2" circuits

ATTENTION!	
	⚡ The SLS518 K4 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.

Further information

- Typ. operating range limit: max. attainable range without function reserve
- Operating range: recommended range with function reserve