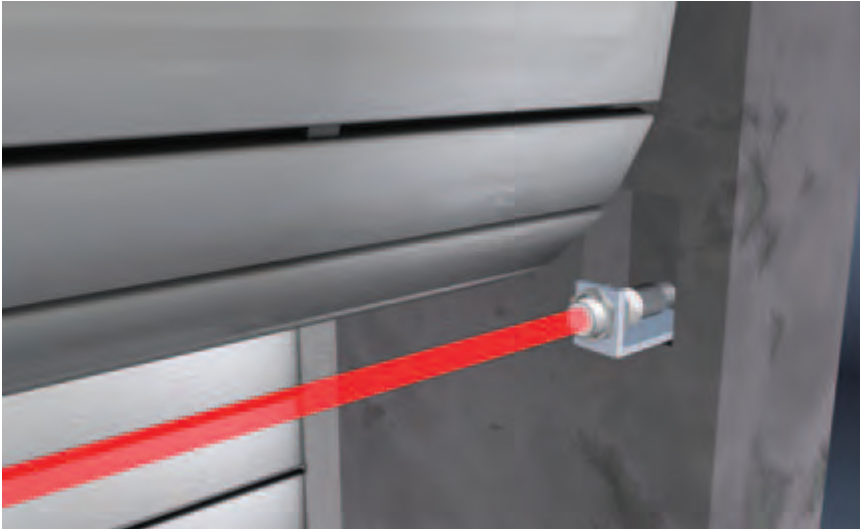


SINGLE LIGHT BEAM SAFETY DEVICES

SLS 318



Roller shutter guarding with SLS 318 Single Light Beam Safety Device

The case often arises in which Single Light Beam Safety Devices have to be integrated into very tight installation areas. In this instance, SLS 318 Light Beam Safety Devices are the preferred choice. Because of their slender cylindrical construction they can be mounted quickly and easily, even in areas where space is restricted. They are also to be recommended here on the basis of their IP 67 protection rating for demanding industrial applications, whereby the device model can be selected as either plastic or stainless steel. The SLS 318 Safety Light Beam Devices enable switching frequencies of 1000 Hz and together with a Test Monitoring Unit such as the TNT 35 or a configurable MSI Safety Relay, they form type 2 active opto-electronic protective devices.

Typical areas of application

- In difficult industrial conditions
- Wood processing and paper industry
- Print and packaging machinery

Important technical data, overview

Type in accordance with IEC/EN 61496	2
Category in accordance with EN ISO 13849	2
Operating range	0...10 m
Operating voltage, U _B	10... 30 V DC
Dimensions	Cylindrical construction, M18x1
Housing	Plastic Metal housing on request
Switching output	pnp transistor output
Connection system	Cable, 2 m M12 round pin plug

Functions

LED display

Activation input for test and series connection

Function extension

With Safety Interface	Relay output	RES	EDM	Muting	Further details
TNT 35	●	●	●		p. 478
MSI-s	●	●	●		p. 450
MSI-sx	●	●	●		p. 450
MSI-m	●	●	●	●	p. 464

Special features

- Housing (plastic or stainless steel) in short cylindrical design, M18x1 in accordance with IP 67 protection rating
- 2 antivalent switching outputs for light/dark switching and as control function
- Visible red light in straight optics
- Switching frequency, 1000 Hz
- LED display in transmitter and receiver
- Adjustable responsivity



Features



Further information	Page
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● Electrical connection, see LS763 connection example	281
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SINGLE LIGHT BEAM SAFETY DEVICES

Ordering information

SLS 318, consisting of transmitter and receiver

Functions: Activation input for test and series connection

Art. no.	Article	Description	Connection system
50083116	SLSS 318K-S12	Transmitter, plastic, red light	M12 round pin plug, 4-pin
50083117	SLSE 318K/P-S12	Receiver, plastic, red light	M12 round pin plug, 4-pin
50083132	SLSS 318K	Transmitter, plastic, red light	Cable, 2 m
50083133	SLSE 318K/P	Receiver, plastic, red light	Cable, 2 m

You will find further information and ordering info in the Leuze electronic Opto-Electronic Sensors Catalog.

Electrical connection

See LS 763 connection example, page 281.

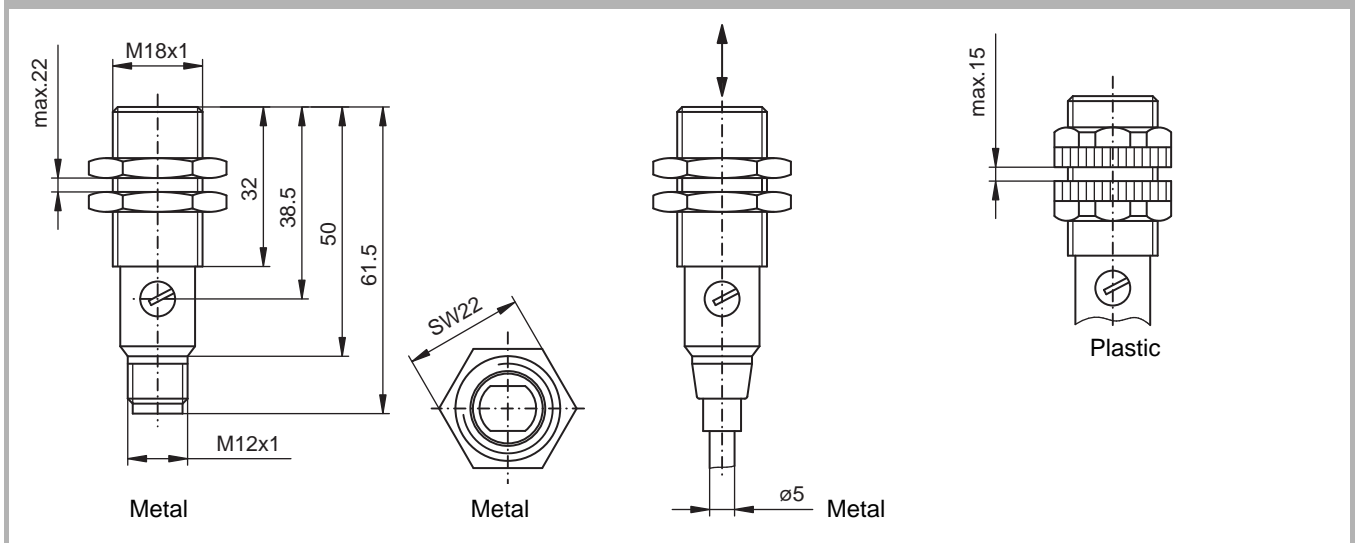
Technical data

General system data

Type in accordance with IEC/EN 61496	2
Service life (T_M) in accordance with EN ISO 13849-1	20 years
Category in accordance with EN ISO 13849	2
Mean time to dangerous failure ($MTTF_d$) in accordance with EN ISO 13849-1	414.1 years
Operating range	0...10 m
Response time	0.5ms
Operating voltage, U_B	10... 30 V DC
Safety class	II
Protection rating	IP 67
Temperature range, operation/storage	-25...+65°C / -40...+70°C
Dimensions	Cylindrical construction, M18x1
Housing	Metal, plastic
Weight (transmitter and receiver)	15 g (plug variant, plastic housing), 85 g (cable variant, plastic housing), 35 g (plug variant, metal housing), 105 g (cable variant, metal housing)
Transmitter	
Current consumption	25 mA
Transmitter diodes, class in accordance with EN 60825	1
Light source	Red light
Wavelength	660 nm

Activation input for test and series connection	Active $\geq 8\text{ V}$ / inactive $\leq 1.5\text{ V}$
Connection system	Cable, 2 m M12 round pin plug, 4-pin
Receiver	
Current consumption	25 mA without external load
Switching output	pnp transistor output
Switching voltage high active	Min. $U_v - 1.6\text{ V}$
Switching voltage low	Max. 1.6 V
Output current	Max. 100 mA
Connection system	Cable, 2 m M12 round pin plug, 4-pin

Dimensional drawings



Accessories ordering information

Art. no.	Article	Description	Length, design
Connection cables			
50104545	K-D M12W-4P-5m-PVC	Connecting cable, 5 m, M12, 4-pin	Angled, PVC
50104544	K-D M12A-4P-5m-PVC	Connecting cable, 5 m, M12, 4-pin	Axial, PVC