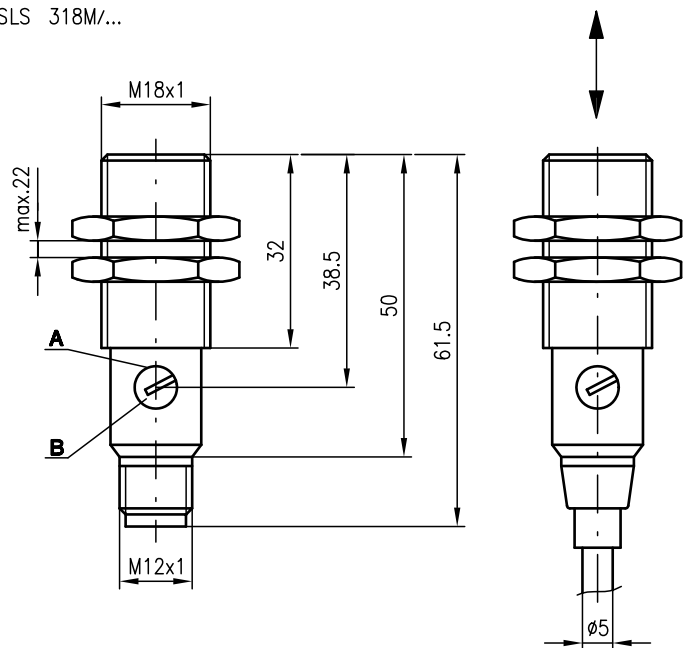


**SLS 318**

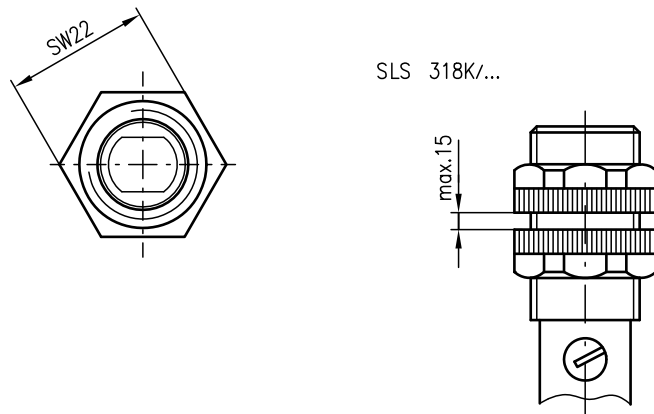
**Protective throughbeam photoelectric sensors**

**Dimensioned drawing**

SLS 318M/...

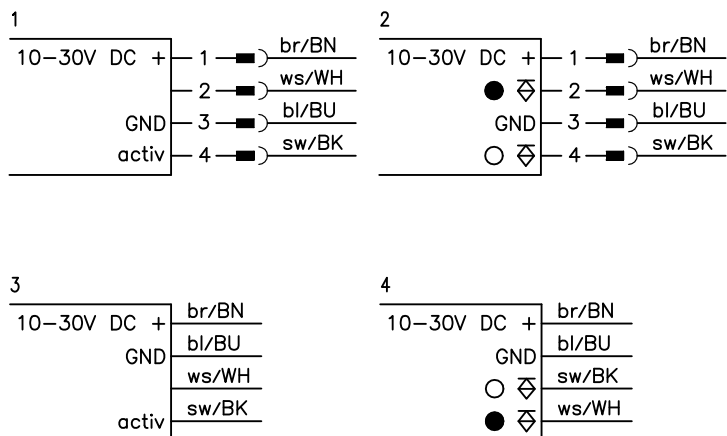


SLS 318K/...



- A Indicator diode
- B Sensitivity adjustment

**Electrical connection**



Part No. 501 08664



0 ... 12m



- Protective throughbeam photoelectric sensors with high performance reserve in visible red light and straight optics
- Robust cylindrical stainless steel or plastic housing M18x1, protection class IP 67 for industrial application
- Activation input for testing and interlinking
- Complementary switching outputs for light/dark switching or as a control function
- Very short construction for application in limited spaces
- LED indicator in transmitter and receiver



**Accessories:**

(available separately)

- Mounting systems (BT 318, BT 318-ARH)
- M12 connectors (KD ...)
- Ready-made cables (K-D ...)
- Test-monitoring unit: - available only from Leuze lumiflex

We reserve the right to make changes\*318\_a03GB.fm

## Specifications

### Optical data

Typ. operating range limit <sup>1)</sup>	0 ... 12m
Operating range <sup>2)</sup>	0 ... 10m
Light source	LED (modulated light)
Wavelength	660nm

### Timing

Switching frequency (sensor)	1000Hz
Response time (sensor)	0.5ms
Delay before start-up	≤ 30ms

### Electrical data

Operating voltage U <sub>B</sub>	10 ... 30VDC
Residual ripple	≤ 10% of U <sub>B</sub>
Bias current	≤ 25mA
Switching output	2 transistor outputs, complementary
Function characteristics	light/dark switching
Signal voltage high/low	≥ (U <sub>B</sub> -1.6V)/≤ 1.6V
Output current	max. 100mA
Sensitivity	adjustable

### Indicators

<b>Receiver</b>	
LED red	light path free
LED red flashing	light path free, no performance reserve
<b>Transmitter</b>	
LED red	transmitter ON

### Mechanical data

Housing	polyamide 12 or stainless steel
Optics cover	polyamide 12
Weight	90g (cable), 20g (M12)
Connection type	M12 connector, 4-pin cable 2m, 4x0.25mm <sup>2</sup>

### Environmental data

Ambient temp. (operation/storage)	-25°C ... +65°C/-40°C ... +70°C
Protective circuit <sup>3)</sup>	1, 2, 3, 4
VDE safety class <sup>4)</sup>	II, all-insulated
Protection class	IP 67
LED class	1 (acc. to EN 60825-1)
Standards applied	IEC 60947-5-2

### Options

Activation input activ	
Transmitter active/not active	≥ 8V/≤ 1.5V or not connected

- 1) Typ. operating range limit: max. range without performance reserve  
 2) Operating range: recommended range with performance reserve  
 3) 1=transient protection, 2=polarity reversal protection, 3=short circuit protection for all outputs, 4=interference blanking  
 4) Rating voltage 250VAC

## Order guide

Selection table		Order code →			
Equipment ↓		SLS 318K/P-S12 Part No. 500 83116 (Tr) Part No. 500 83117 (Re)	SLS 318M/P-S12 Part No. 500 82199 (Tr) Part No. 500 82200 (Re)	SLS 318K/P Part No. 500 83132 (Tr) Part No. 500 83133 (Re)	SLS 318M/P Part No. 500 83135 (Tr) Part No. 500 83136 (Re)
Housing	plastic	●		●	
	stainless steel		●		●
Connection	M12 connector	●	●		
	cable			●	●
Switching output	PNP	●	●	●	●
	NPN				
Connection diagram	transmitter	1	1	3	3
	receiver	2	2	4	4

## Tables

### SLS 318...

0	10	12
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<input type="checkbox"/>	Operating range [m]
<input type="checkbox"/>	Typ. operating range limit [m]

## Diagrams

## Remarks

- The protective through-beam photoelectric sensor is a contactless active protective device only in connection with a safety-relevant control system, in which the cyclical testing of transmitter and receiver is carried out according to EN 61496-1, category 2 (testing).
- The power supply unit used to operate the photoelectric sensor has to be able to compensate for changes and interruptions of the supply voltage acc. to EN 61496-1. Minimum blackening object: Ø 13mm.

### Approved purpose:

The protective throughbeam photoelectric sensors are optical electronic sensors for optical, contactless detection of objects.