SLSR 95

Protective throughbeam photoelectric sensors

0 ... 10m

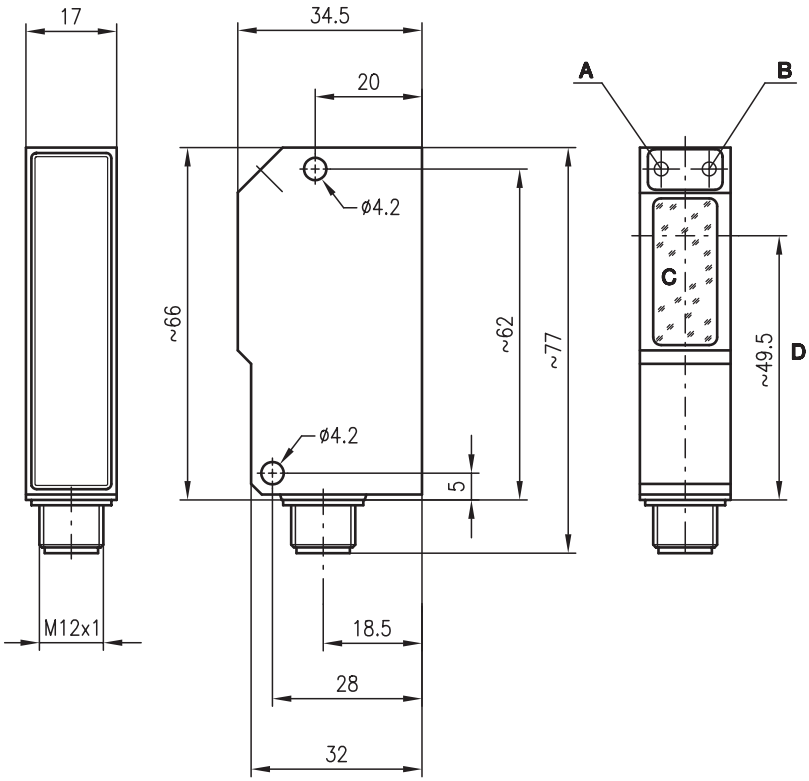
10 - 30 V DC

BWS Typ 2

TÜV HANNOVER SACHSEN-ANHALT

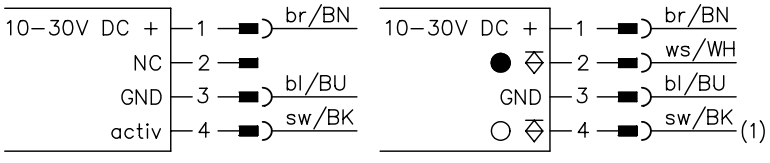
- Protective throughbeam photoelectric sensor with high performance reserve in visible red light
- Small construction with glass cover and robust zinc diecast housing, protection class IP 67 for industrial application
- Complementary outputs for light/dark switching or as a control function

Dimensioned drawing



A Switching indicator yellow
B Operation indicator green
C Transmitter/receiver
D Optical axis

Electrical connection



(1) For operation with Leuze test-monitoring units, the photoelectric sensor must be connected in light switching mode (pin 4)

CE ISO 9001 IP 67 IEC 60947... IEC 60947...

Accessories:

(available separately)

- Mounting systems (BT 95, UMS 1)
- M12 connectors (KD ...)
- Ready-made cables in straight or angular versions, length 5m (KB ...)
- Test-monitoring unit:
  - TNT 32 (Part No. 500 20476)
  - TNT 33 (Part No. 500 28158)
  - TNT 34 (Part No. 500 81023)
  - TNT 35 (Part No. 500 33058)
  - TMC 66 (Part No. 500 82121)

Specifications

Optical data

Typ. operating range limit [1]	0 … 10m
Operating range [2]	0 … 8m
Light source	LED (modulated light)
Wavelength	660nm

Timing

Switching frequency	200Hz
Response time	2.5ms
Delay before start-up	≤ 100ms

Electrical data

Operating voltage U_B	10 … 30VDC (incl. residual ripple)
Residual ripple	≤ 15% of U_B
Bias current	≤ 35mA
Switching output	2 PNP transistor outputs, complementary
Function characteristics	light/dark switching
Signal voltage high/low	≥ (U_B-2V)/≤ 2V
Output current	max. 100mA

Indicators

Receiver	
LED green	ready
LED yellow	light path free
LED yellow flashing	light path free, no performance reserve
Transmitter	
LED green	ready
LED yellow	transmitter ON

Mechanical data

Housing	diecast zinc
Optics	glass
Weight	90g
Connection type	M12 connector, stainless steel receiver 4-pin, transmitter 4-pin

Environmental data

Ambient temp. (operation/storage) [3]	-25°C (-30°C) … +60°C/-40°C … +70°C
Protective circuit [4]	2, 3
VDE safety class [5]	II, all-insulated
Protection class	IP 67
Standards applied	IEC 60947-5-2

Options

Activation input activ	
Transmitter active/not active	≥ 8V/≤ 2V or not connected
Activation/disable delay	≤ 1ms
Input resistance	4.7k<Ω ± 10%

1) Typ. operating range limit: max. attainable range without performance reserve
2) Operating range: recommended range with performance reserve
3) -30°C with operating voltage continuously applied
4) 2=polarity reversal protection, 3=short-circuit protection for all outputs
5) Rating voltage 250VAC

Order guide

	Designation	Part No.
Transmitter and receiver	SLSR 95/44.8 L	
Transmitter	SLSR 95/2.8 SE-L	500 80183
Receiver	SLSR 95/44 E-L	500 80184

Tables

Diagrams

Remarks

The protective throughbeam 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.