



SLS 46

Protective throughbeam photoelectric sensors

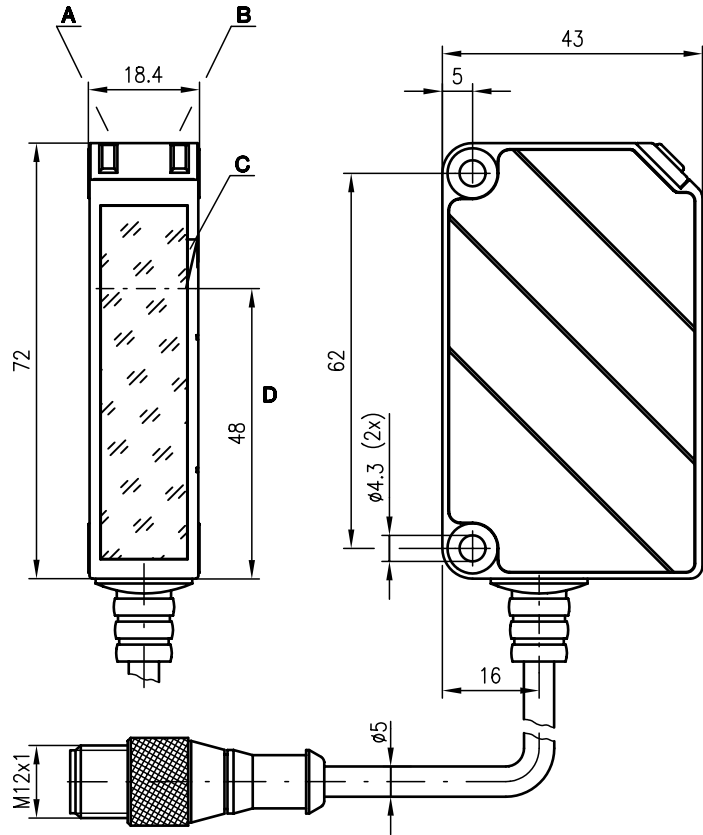


36m



- Protective throughbeam photoelectric sensors with high performance reserve in infrared light
- Solid plastic housing, protection class IP 67 for industrial application
- Wide voltage range 10 ... 30V with PNP switching output for PLC applications
- Activation input for testing and interlinking

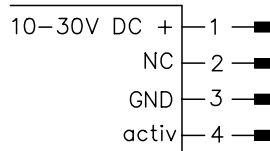
Dimensioned drawing



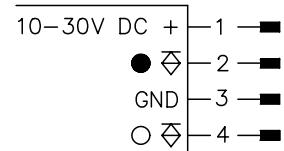
- A Indicator diode green
- B Indicator diode yellow
- C Marker
- D Optical axis

Electrical connection

SLSS 46.8, 300-S12



SLSE 46/44, 300-S12



Accessories:

(available separately)

- Mounting systems (BT 46.1, BT 46.1.5, BT 46.2)
- M12 connectors (KD ...)
- Ready-made cables (KB ...)
- Test-monitoring units:
 - 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)

We reserve the right to make changes • 46_a04e.fm



Specifications

Optical data

Typ. operating range limit ¹⁾	0 ... 36m
Operating range ²⁾	0 ... 30m
Light source	LED (modulated light)
Wavelength	880nm

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	≤ 30mA
Switching output	PNP transistor
Function characteristics	light/dark switching (complementary)
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 active

Mechanical data

Housing	plastic
Optics cover	plastic
Weight	100g
Connection type	cable with M12 connector, cable length: 300mm

Environmental data

Ambient temp. (operation/storage)	-20°C ... +60°C/-40°C ... +70°C
Protective circuit ³⁾	2, 3
VDE safety class ⁴⁾	II, all-insulated
Protection class	IP 67
Standards applied	IEC 60947-5-2

Options

Activation input activ	
Transmitter active/not active	≥ 8V/≤ 2V
Activation/disable delay	≤ 1ms/≤ 2ms
Input resistance	10KΩ ± 10%

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

Order guide

	Designation	Part No.
with M12 connector		
Transmitter and receiver	SLS 46/44.8, 300-S12	
Transmitter with activation input	SLSS 46.8, 300-S12	500 60937
Receiver	SLSE 46/44, 300-S12	500 60938

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).
 Minimum blackening object: Ø22mm.
 At the device, the tip of the marker indicates the location of the optical axis.