

SLS 46

Through-beam Safety Light Barriers (AOPD type 2)



SLS 46

In conjunction with a test monitoring unit, such as for instance the TNT 35 or MSI, this opto-sensor with test input constitutes an active optoelectronic protective device of type 2.

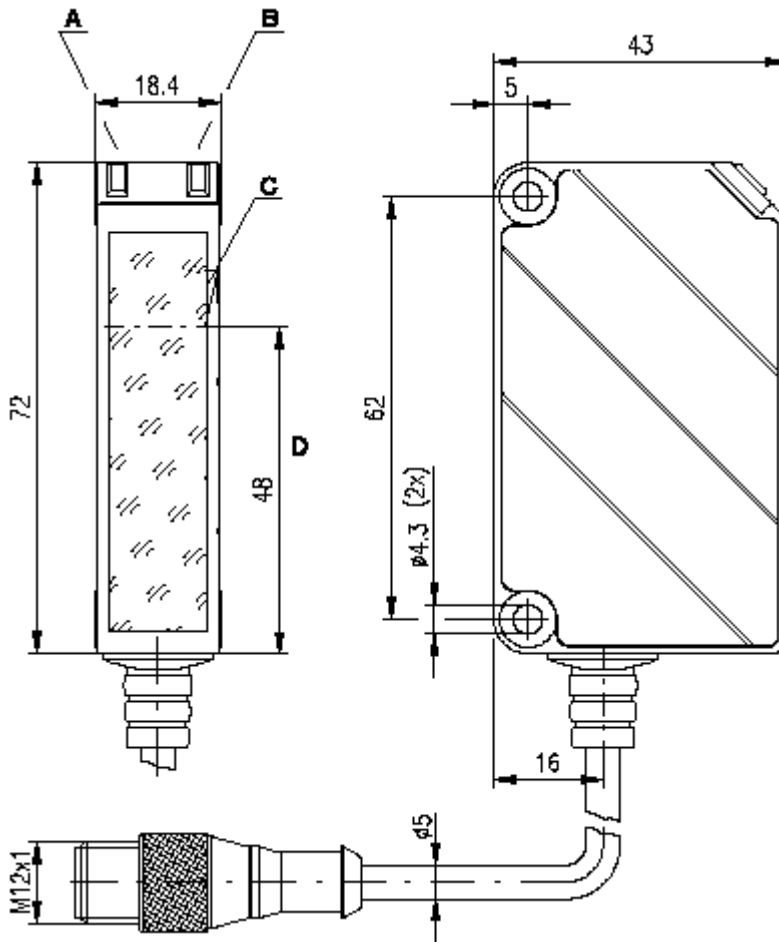
Advantages

- Infrared light protective throughbeam photoelectric sensors with high performance reserve
- 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

SLS 46

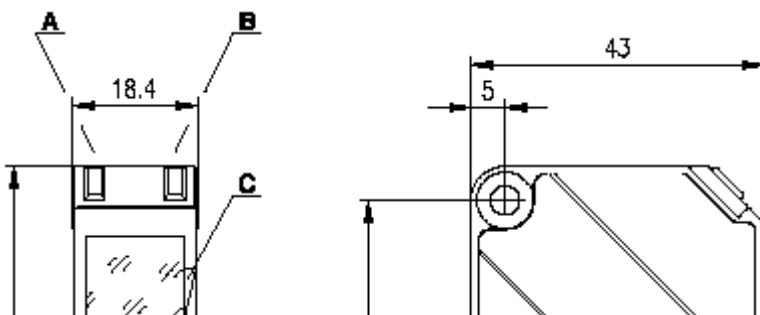
Dimensional Drawings

SLS 46/44.8, 300-S12



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

SLS 46/44.8-S12 and SLS 46/44.8, 2000



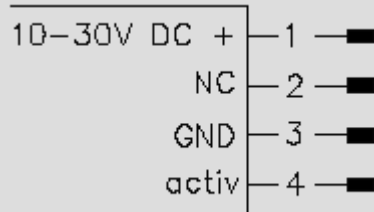
- A) Indicator diode green
- B) Indicator diode yellow
- C) Marker
- D) Optical axis

SLS 46

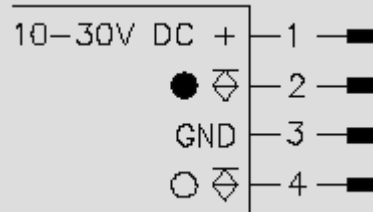
Electrical Connection

Sample connection SLS 46/44.8, 300-S12

Transmitter with activation input

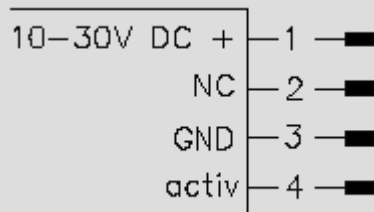


Receiver

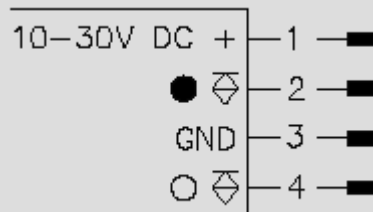


Sample connection SLS 46/44.8-S12

Transmitter with activation input

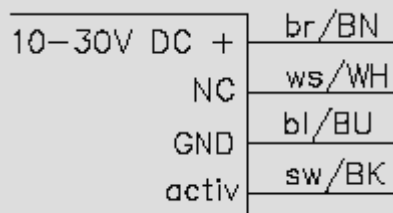


Receiver

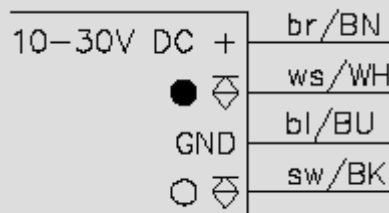


Sample connection SLS 46/44.8, 2000

Transmitter with activation input



Receiver



SLS 46

Technical Data

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 LED yellow LED yellow flashing	ready light path free light path free, no performance reserve
Transmitter LED green LED yellow	ready transmitter active
Mechanical data	
Housing	plastic
Optics cover	plastic
Weight	100g
Connection type	M12 connector, or cable, cable length: 2000mm, PVC
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	IP65
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

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.