

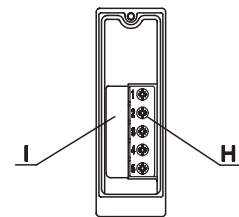
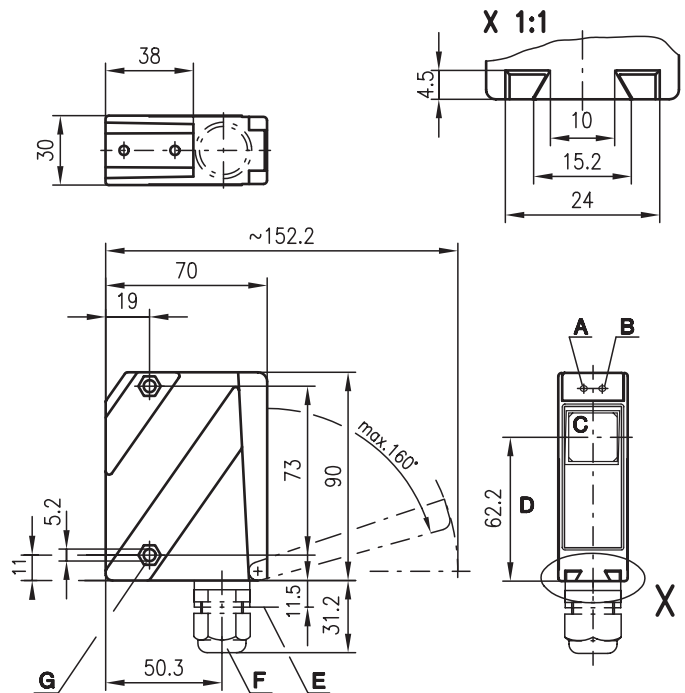


SLS 96

Protective throughbeam photoelectric sensors



Dimensioned drawing



- A** Indicator diode green
- B** Indicator diode yellow
- C** Transmitter/receiver
- D** Optical axis
- E** Device plug M12x1
- F** Screwed cable gland M16x1.5 for Ø 5 ... 10mm
- G** Countersinking for SK nut M5, 4.2 deep
- H** Connection terminals
- I** Cable entry



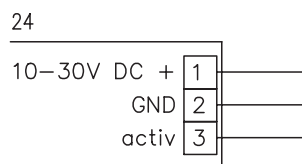
65 m
39 m



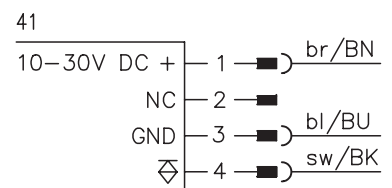
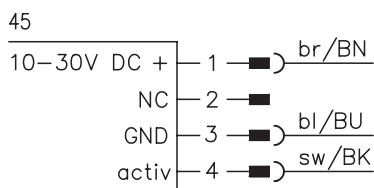
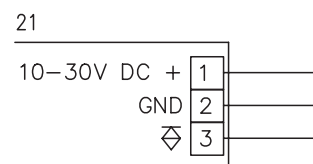
- Protective throughbeam photoelectric sensor cat. 2 (testing) with high performance reserve in visible red light or infrared light
- Robust metal housing with glass cover or plastic housing, protection class IP 67 for industrial application
- 2 indicators each at the transmitter and receiver for displaying their status when commissioning and in operation
- Optics heating for use with low temperatures
- Connection via M12 connector or terminal compartment

Electrical connection

Transmitter



Receiver



Accessories:

(available separately)

- Mounting systems (BT 96, BT 96.1, UMS 96, BT 450.1-96)
- M12 connectors (KD ...)
- Ready-made cables (K-D ...)
- Alignment aid ARH 96
- Test-monitoring units:
- available only from Leuze lumiflex

We reserve the right to make changes • 96_a12e.fm



Specifications

Optical data

Typ. operating range limit ¹⁾
 Operating range ²⁾
 Light source
 Wavelength

Infrared light

0 ... 65m
 0 ... 50m
 LED (modulated light)
 880nm

Red light

0 ... 39m
 0 ... 30m
 LED (modulated light)
 660nm

Timing

Sensor switching frequency
 Sensor response time
 Delay before start-up

500Hz
 1 ms
 ≤ 200ms

Electrical data

Operating voltage U_B
 Residual ripple
 Bias current
 Switching output
 Function characteristics
 Signal voltage high/low
 Output current

10 ... 30VDC (incl. residual ripple)
 ≤ 15% of U_B
 ≤ 50mA
 PNP transistor
 light switching
 ≥ (U_B-2V)/≤ 2V
 max. 100mA

Indicators

LED green

ready

Receiver

LED yellow
 LED yellow flashing

light path free
 light path free, no performance reserve

Transmitter

LED yellow

transmitter active

Mechanical data

Housing
 Optics cover
 Weight
 Connection type

Plastic housing

polycarbonate
 plastic
 150g
 terminals or M12 connector

Environmental data

Ambient temp. (operation/storage)
 Protective circuit ³⁾
 VDE safety class ⁴⁾
 Protection class
 LED class
 Standards applied

-20°C ... +60°C/-40°C ... +70°C
 1, 2, 3
 II, all-insulated
 IP 67
 1 (acc. to EN 60825-1)
 IEC 60947-5-2

Options

Optics heating

Low temperature

Activation input

Transmitter active/not active
 Activation/disable delay
 Input resistance

for temperature changes, prevents fogging
 to -35°C
 ≥ 8V/≤ 2V
 ≤ 1ms
 10KΩ ± 10%

1) Typ. operating range limit: max. attainable 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) Rating voltage 250VAC

Tables

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 dia: Ø 28mm.

SLS = Pair consisting of
 SLSS = Transmitter
 SLSE = Receiver

Order guide

Selection table		Order code →						
Equipment ↓		SLS 96K/P-1070-T2-2 Part No. 500 81292 (Tr) Part No. 500 81293 (Re)	SLS 96K/P-1070-T2-4 Part No. 500 31559 (Tr) Part No. 500 31561 (Re)	SLS 96K/P-1200-T2-2 Part No. 500 28009 (Tr) Part No. 500 28010 (Re)	SLS 96K/P-1200-T2-4 Part No. 500 28011 (Tr) Part No. 500 28012 (Re)	SLS 96K/P-1207-T2-2 Part No. 500 28009 (Tr) Part No. 500 35078 (Re)	SLS 96K/P-1207-T2-4 Part No. 500 28011 (Tr) Part No. 500 41109 (Re)	
Housing	metal							
	plastic	●	●	●	●	●	●	
Light source	red light (30m)			●	●	●	●	
	infrared light (50m)	●	●					
Connection	terminals	●		●		●		
	M12 connector		●		●		●	
Features	optics heating/low temp.							
	activation input	●	●	●	●	●	●	
	filter for multi-axis operation					●	●	

SLS 96K/P-1070-T2-2

SLSS 96K-1080-T2-24
 SLSE 96K/P-1070-T2-21

SLS 96K/P-1070-T2-4

SLSS 96K-1080-T2-45
 SLSE 96K/P-1070-T2-41

SLS 96K/P-1200-T2-2

SLSS 96K-1210-T2-24
 SLSE 96K/P-1200-T2-21

SLS 96K/P-1200-T2-4

SLSS 96K-1210-T2-45
 SLSE 96K/P-1200-T2-41

SLS 96K/P-1207-T2-2

SLSS 96K-1210-T2-24
 SLSE 96K/P-1207-T2-21

SLS 96K/P-1207-T2-4

SLSS 96K-1210-T2-45
 SLSE 96K/P-1207-T2-41