

Model Number

SLP8-2

Safety light grid

Features

- Sensing range 8 m
- Self-monitoring (type 4 according to IEC/EN 61496-1)
- 2-radial design
- Beam spacing 500 mm
- Red transmission light
- Integrated function display
- Pre-fault indication
- Operation on control units of SB4 (SafeBox)

Accessories

SLP-X-M

Deviation mirror for SLP

MS SLP

Mounting bracket for Light grid

PG SLP-X

Protective glass panes for SLP series

PG HOLDER SLP

Holders for SLP protective glass panes

PA SLP/SLC

Profile alignment aid

BA SLP

laser alignment aid for safety light grids series SLP

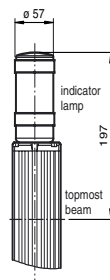
UC SLP/SLC

Floor stand for all series SLP/SLC devices

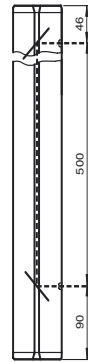
Additional accessories can be found in the Internet.

Dimensions

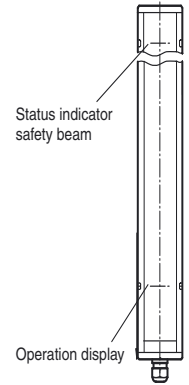
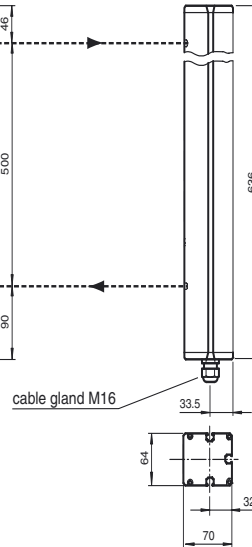
Option -L with indicator lamp
(transceiver only)



Mirror SLP8-2-M

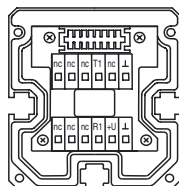


Transceiver SLP8-2-A



Electrical connection

Transceiver SLP8-2-A

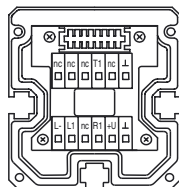


T1
R1
+U
L

Tn
Rn
24 V
0 V

Control Unit
SLVA or SC

Transceiver SLP8-2-A-L

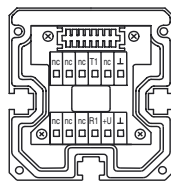


T1
R1
+U
L
L1

Tn
Rn
24 V
0 V
Muting +
Muting -

Control Unit
SLVA or SC

Transceiver SLP8-2-A

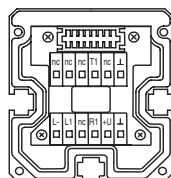


T1
R1
+U
L

emitter x output
receiver x input
receiver +24 V
receiver 0 V

Control Unit
SafeBox Module 4X

Transceiver SLP8-2-A-L



T1
R1
+U
L
L1

0 V muting lamp
muting lamp trigger

emitter x output
receiver x input
receiver +24 V
receiver 0 V

Control Unit
SafeBox Module 4X

Technical data

System components

Transceiver	SLP8-2-A
Mirror pillar	SLP8-2-M

General specifications

Effective detection range	0.2 ... 8 m
Light source	LED
Light type	modulated visible red light
Tests	IEC/EN 61496
Safety type according to IEC/EN 61496	4
Marking	CE
Target size	static: 32 mm dynamic: 50 mm (at $v = 1.6$ m/s of the obstacle)
Beam spacing	500 mm
Number of beams	2
Angle of divergence	$< 5^\circ$

Functional safety related parameters

Safety Integrity Level (SIL)	SIL 3
Performance level (PL)	PL e
Category	Cat. 4
Mission Time (T_M)	20 a
PFH_d	2.81 E-9
Type	4

Indicators/operating means

Operation indicator	LED red in transceiver
Function indicator	LED red: per receiver channel off: Interruption flashes: receiver continuously on: reception with sufficient stability control
Pre-fault indicator	Functional display flashing

Electrical specifications

Operating voltage	U_B	Power supply via control unit
Protection class	III	

Ambient conditions

Ambient temperature	$-20 \dots 60^\circ\text{C}$ ($-4 \dots 140^\circ\text{F}$)
Storage temperature	$-20 \dots 70^\circ\text{C}$ ($-4 \dots 158^\circ\text{F}$)
Relative humidity	max. 95 %, not condensing

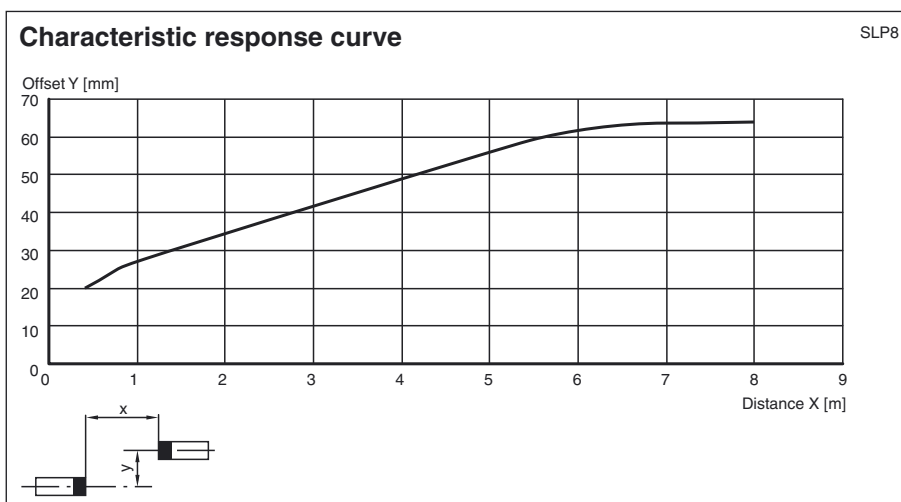
Mechanical specifications

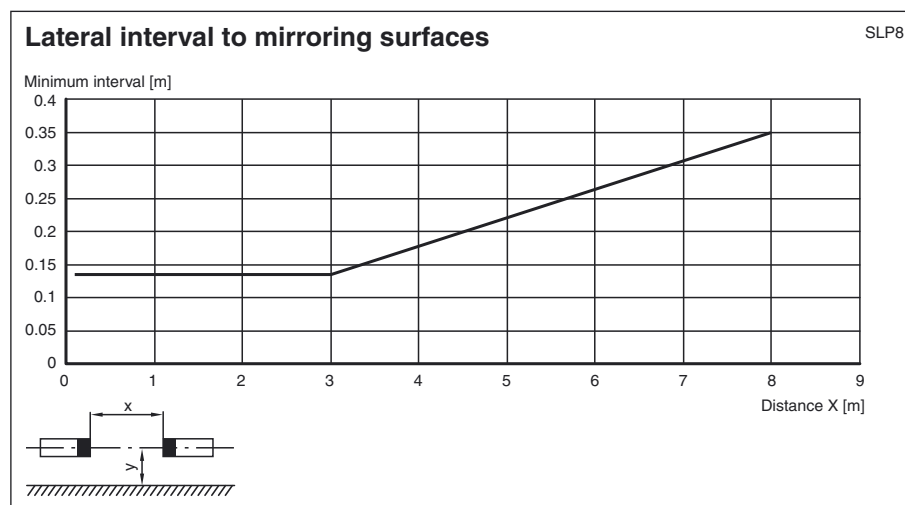
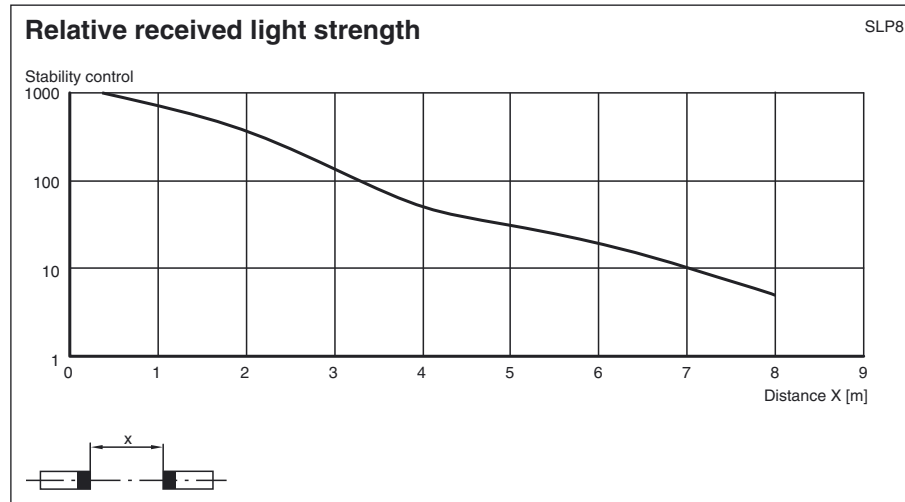
Protection degree	IP65
Connection	M16 cable gland , terminal compartment
Connection options	Further electrical connection options on request: Connector DIN 43 651 Hirschmann, emitter: 6-pin+PE, receiver: 11-pin+PE
Material	
Housing	extruded aluminum profile, RAL 1021 (yellow) coated
Optical face	Plastic pane
Mass	Per 2100 g

Approvals and certificates

CCC approval	CCC approval / marking not required for products rated ≤ 36 V
Approvals	TÜV

Curves/Diagrams





Application

The SLP8-2-A and SLP8-2-M devices can be used to set up dual-beam access protection with a fixed beam gap of 500 mm in accordance with EN 999. The SLP8-2-A profile comprises a light source and a light receiver (active). This device must be connected to the SLVA-4K+ and SLVA-8K evaluation units or to SB4-series switching devices. The SLP8-2-A cannot be operated without an evaluation unit.

The SLP8-2-M profile includes two reflecting mirrors arranged in such a way that the light beam emitted from the transmitter on the SLP8-2-A is returned at a distance of 500 mm and is picked up by the receiver on the SLP8-2-A.

This safety thru-beam sensor system may only be used in accordance with its intended purpose as an **active opto-electronic protective device (AOPD)** for securing hazardous areas.

If used for any other purpose, the intended function of the system cannot be guaranteed.

The applicable safety regulations, standards and provisions must be observed when operating the system, and the specific requirements of the application in question must be taken into consideration.

System accessories

- Control unit SafeBox
- Mounting set MS SLP
- Protective glass pieces for SLP (to protect the optically functional surface)
- Ground pillar UC SLP/SLC
- Housing for pillar Enclosure UC SLP/SLC
- Collision protector Damping UC SLP/SLC

- Profile alignment aid
- Laser alignment aid SLP
- Redirection mirror for multi-side protection of hazardous areas
SLP-...-M
- Muting Set
MS SLP/SLA28
MS SLPCM