



## Model Number

### SLA12/124

with metal connector M12; 5-pin, 90° convertible

## Features

- Sensing range up to 10 m
- Self-monitoring (type 4 according to IEC/EN 61496-1)
- Red transmission light
- Integrated alignment aid
- Clearly visible LED functional display and pre-fault indicator on the receiver
- Sturdy housing
- Waterproof, degree of protection IP67
- Operation on control units of SB4 (SafeBox)

## Accessories

### SLA-1-M

Deviation mirror

### OMH-06

Mounting aid for round steel ø 12 mm or sheet 1.5 mm ... 3 mm

### OMH-MLV12-HWG

Mounting bracket for series MLV12 sensors

### OMH-MLV12-HWK

Mounting bracket for series MLV12 sensors

### OMH-K01

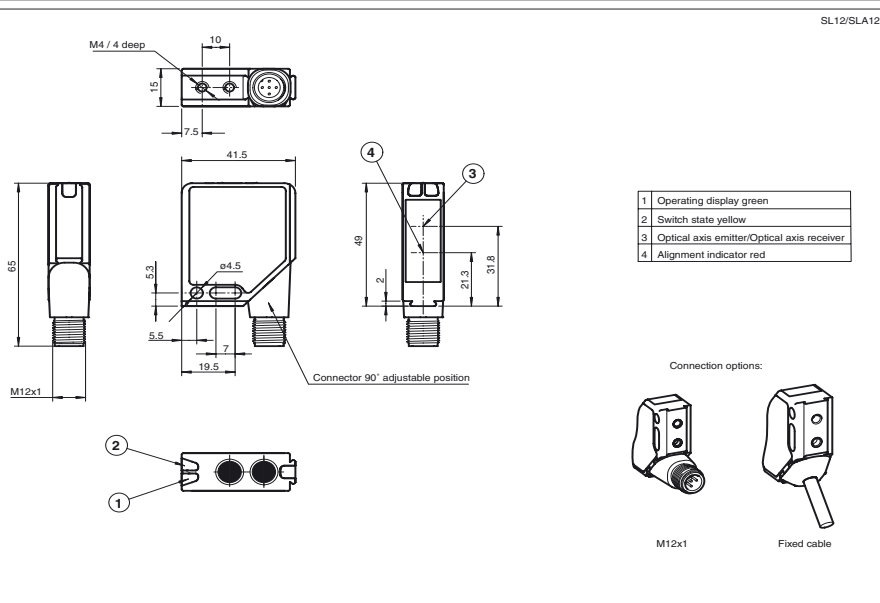
dove tail mounting clamp

### OMH-K02

dove tail mounting clamp

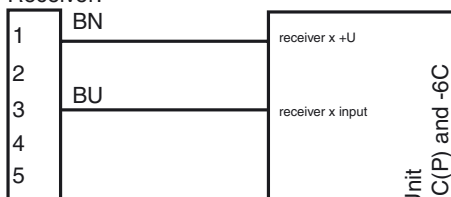
Additional accessories can be found in the Internet.

## Dimensions

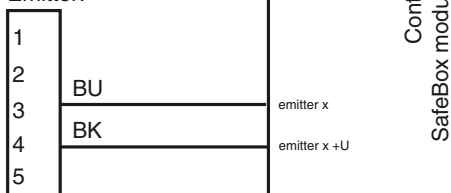


## Electrical connection

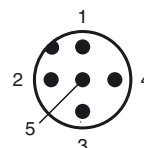
Receiver:



Emitter:



## Pinout



## Technical data

### System components

Emitter	SLA12-T/124
Receiver	SLA12-R/124

### General specifications

Effective detection range	0.2 ... 10 m
Threshold detection range	16 m
Light source	LED, 660 nm
Light type	modulated visible red light
Target size	static: 10 mm dynamic: 30 mm (at $v = 1.6$ m/s of the obstacle)
Alignment aid	LED red
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 <sub>d</sub>	4.4 E-10
Type	4

### Indicators/operating means

Operation indicator	LED green
Function indicator	LED yellow: 1. LED lit constantly: signal $> 2 \times$ switching point (function reserve) 2. LED flashes: signal between $1 \times$ switching point and $2 \times$ switching point 3. LED off: signal $<$ switching point

### Electrical specifications

Operating voltage	$U_B$	Power supply via control unit
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### Conformity

Functional safety	ISO 13849-1
Product standard	EN 61496-1 ; IEC 61496-2

### Ambient conditions

Ambient temperature	-20 ... 60 °C (-4 ... 140 °F)
Storage temperature	-20 ... 70 °C (-4 ... 158 °F)
Relative humidity	max. 95 %, not condensing

### Mechanical specifications

Degree of protection	IP67 according to EN 60529
Connection	5-pin M12 x 1 connector with metal thread, 90° rotatable
Material	
Housing	Frame: nickel plated, die cast zinc, Laterals: glass-fiber reinforced plastic PC RAL 1021 (yellow)
Optical face	Plastic pane
Mass	per device 60 g

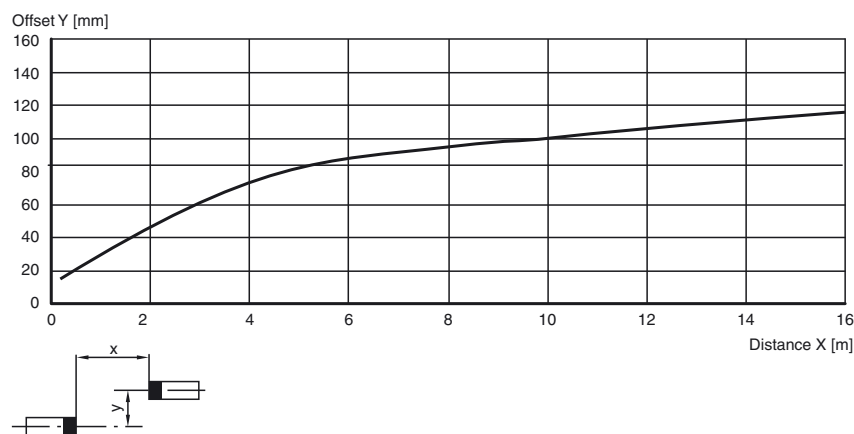
### Approvals and certificates

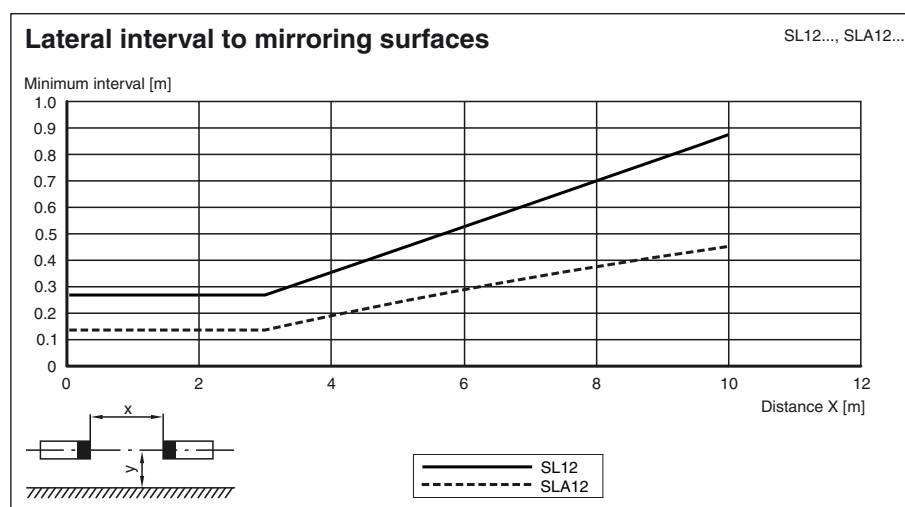
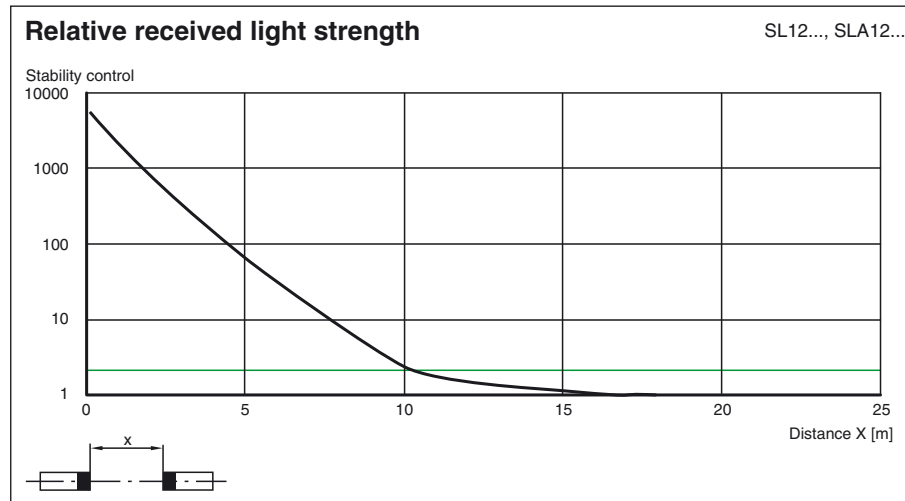
CE conformity	CE
CCC approval	CCC approval / marking not required for products rated $\leq 36$ V
Approvals	TÜV

## Curves/Diagrams

Characteristic response curve

SL12..., SLA12...





## Additional information

For much easier alignment even for long distance applications, an additional red LED is located in the receiver's optics:

- LED constantly illuminated:  
signal strength < switching level
- LED flashes:  
signal strength is between 1-fold switching level and 2-fold switching level
- LED off:  
signal strength  $\geq$  2-fold switching level (function reserve)

## System accessories

### Control units

SC4-2  
SB4 (SafeBox)

### Cable sockets (not for option /115)

straight: V15-G-2M-PVC  
V15-G-5M-PVC  
V15-G-10M-PVC  
angled: V15-W-2M-PVC  
V15-W-5M-PVC  
V15-W-10M-PVC

### Mounting aids



OMH-06  
OMH-MLV12-HWG  
OMH-MLV12-HWK  
OMH-K01  
OMH-K02

**Further accessories**

Redirection mirror  
SLA-1-M