



Model Number

SLA12/115

with fixed cable

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 $\varnothing$ 12 mm or sheet 1.5 mm ... 3 mm

OMH-MLV12-HWG
Mounting bracket for series MLV12 sensors

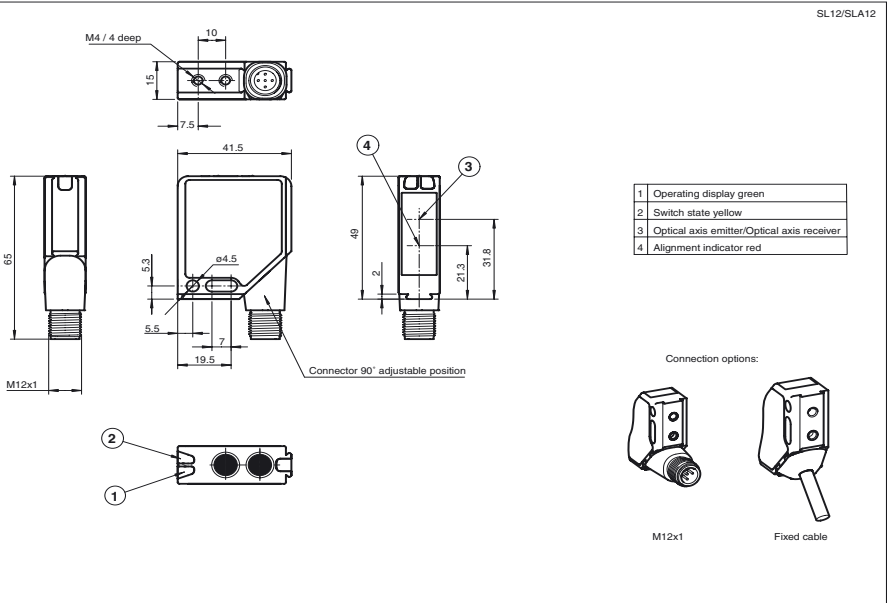
OMH-MLV12-HWK
Mounting bracket for series MLV12 sensors

OMH-K01
dove tail mounting clamp

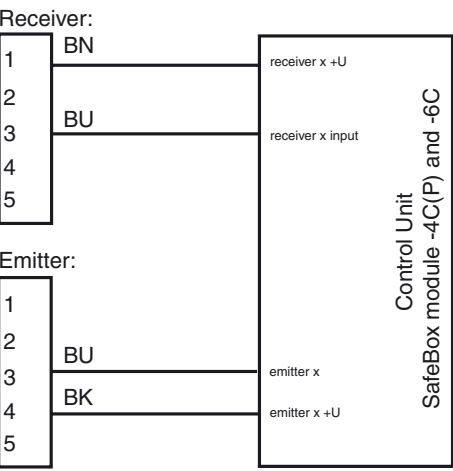
OMH-K02
dove tail mounting clamp

Additional accessories can be found in the Internet.

Dimensions



Electrical connection



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Technical data

System components

Emitter	SLA12-T/115
Receiver	SLA12-R/115

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_d	$4.4 \text{ E-}10$
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	$-20 \dots 60^\circ\text{C}$ ($-4 \dots 140^\circ\text{F}$)
Storage temperature	$-20 \dots 70^\circ\text{C}$ ($-4 \dots 158^\circ\text{F}$)
Relative humidity	max. 95 %, not condensing

Mechanical specifications

Degree of protection	IP67 according to EN 60529
Connection	2.5 m, 5-wire, fixed cable, Euronorm

Material

Housing	Frame: nickel plated, die cast zinc, Laterals: glass-fiber reinforced plastic PC RAL 1021 (yellow)
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Optical face	Plastic pane
Mass	per device 60 g

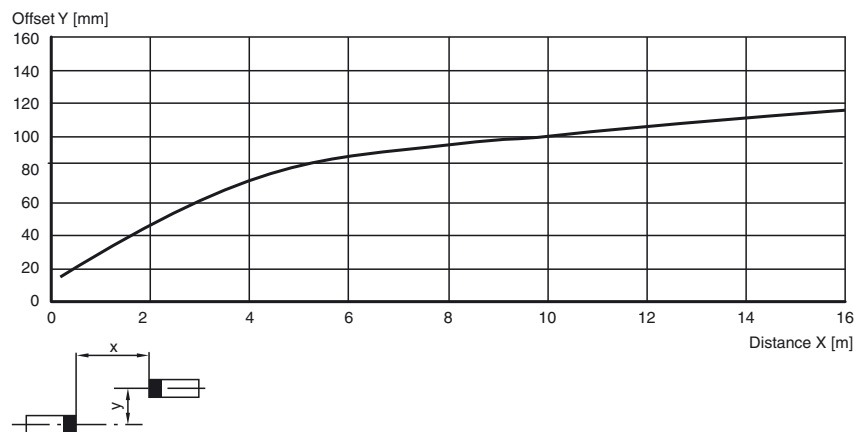
Approvals and certificates

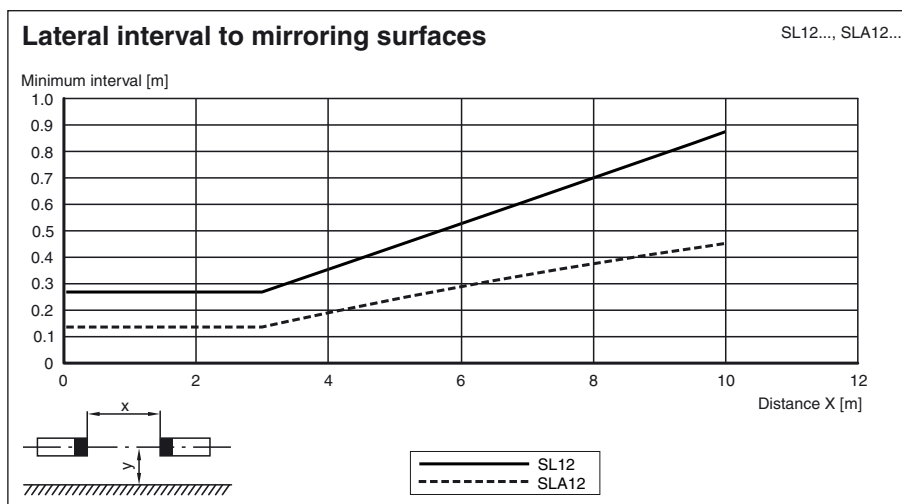
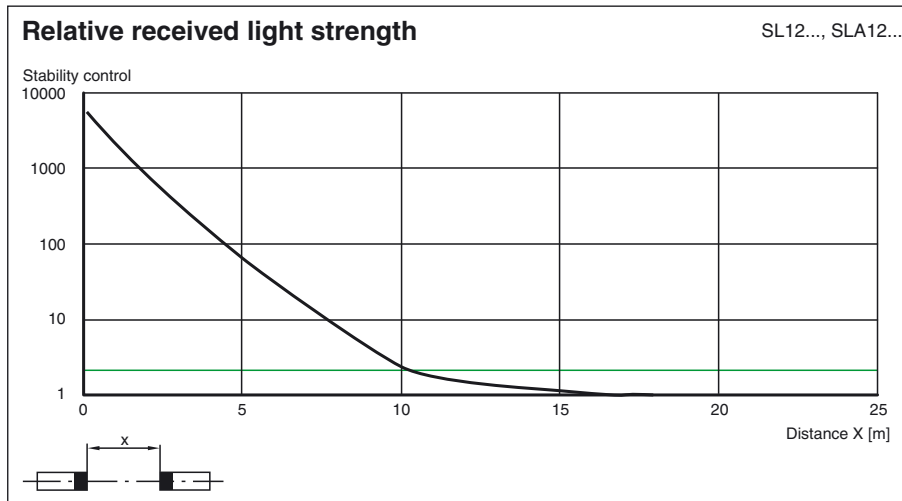
CE conformity	CE
CCC approval	CCC approval / marking not required for products rated $\leq 36 \text{ V}$
Approvals	TÜV

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