



**Model Number**

**SLA12-LAS/35/124**

Safety thru-beam sensor with metal connector M12; 5-pin, 90° convertible

**Features**

- Detection range 30 m
- Visible red light, pulsed LASER light
- Laser class 1, eyesafe
- Performance Level PL e
- Clearly visible LED functional display and pre-fault indicator on the receiver
- Sturdy housing
- Waterproof, protection class IP67
- Operation on control units of series SB4 (SafeBox) and SC4-2

**Accessories**

**SLA-1-M**  
Deviation mirror

**OMH-06**  
Mounting aid

**OMH-MLV12-HWG**  
Mounting aid

**OMH-MLV12-HWK**  
Mounting aid

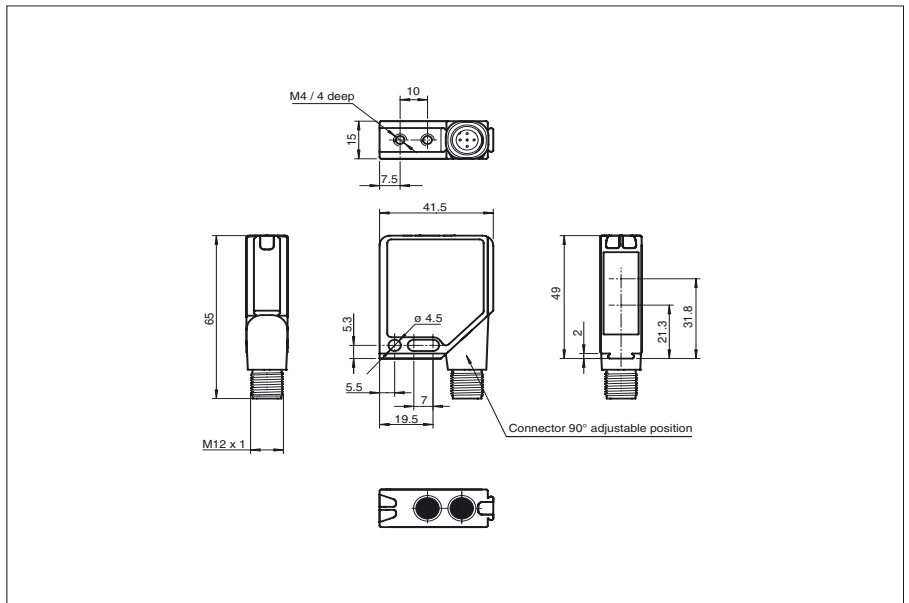
**OMH-K01**  
Mounting aid

**OMH-K02**  
Mounting aid

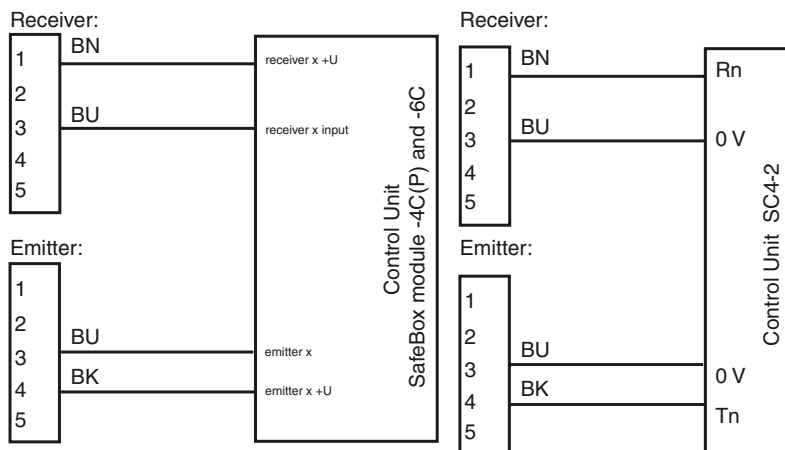
**V15-W-5M-PVC**  
Cable connector

Additional accessories can be found in the Internet.

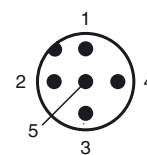
**Dimensions**



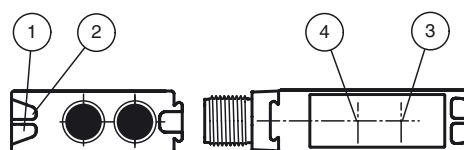
**Electrical connection**



**Pinout**



**Indicators/operating means**



1	Operating display green
2	Switch state yellow
3	Optical axis emitter/Optical axis receiver
4	Alignment indicator red

Release date: 2009-12-14 11:24 Date of issue: 2009-12-14 21:4721\_ENG.xml

Subject to modifications without notice

Pepperl+Fuchs Group  
www.pepperl-fuchs.com

USA: +1 330 486 0001  
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776-4411  
fa-info@pepperl-fuchs.com

Copyright Pepperl+Fuchs  
Singapore: +65 6779 9091  
fa-info@sg.pepperl-fuchs.com

**Technical data**

**General specifications**

Effective detection range	3 ... 30 m
Light source	laser diode , 650 nm
Light type	red, modulated light, < 1 mW
Approvals	TÜV
Tests	IEC/EN 61496
Safety type according to IEC/EN 61496	4
Performance level (PL)	PL e (ISO 13849-1)
Marking	CE, TÜV
Obstacle size	static: 10 mm dynamic: 30 mm (at v = 1.6 m/s of the obstacle)
Laser class	1 acc. to IEC 60825-1
Alignment aid	LED red
Angle of divergence	< 5 °

**Functional safety related parameters**

Safety Integrity Level (SIL)	SIL 3
Performance level (PL)	PL e
Category	Cat. 4
Mission Time (T <sub>M</sub> )	20 a
PFH <sub>d</sub>	4.4 E-10

**Indicators/operating means**

Operating display	LED green
Function display	LED yellow: 1. LED lits constantly: signal > 2 x switching point (function reserve) 2. LED flashes: signal between 1 x switching point and 2 x switching point 3. LED off: signal < switching point

**Electrical specifications**

Operating voltage	U <sub>B</sub>	Power supply via control unit
-------------------	----------------	-------------------------------

**Ambient conditions**

Ambient temperature	0 ... 50 °C (273 ... 323 K)
Storage temperature	-20 ... 70 °C (253 ... 343 K)
Relative humidity	max. 95 %, not condensing

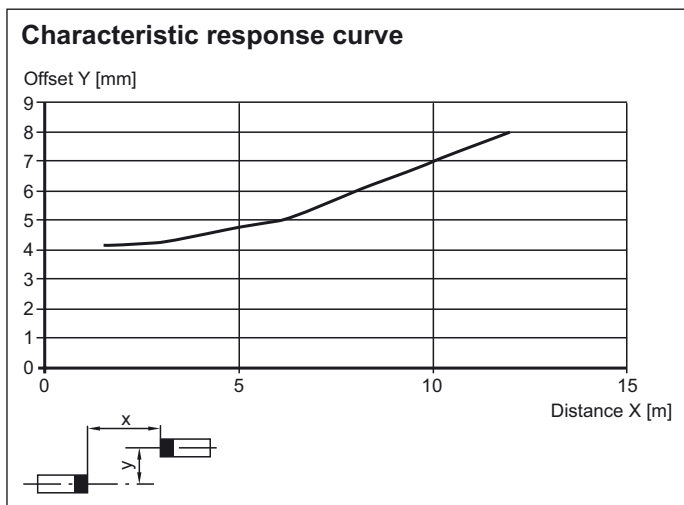
**Mechanical specifications**

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

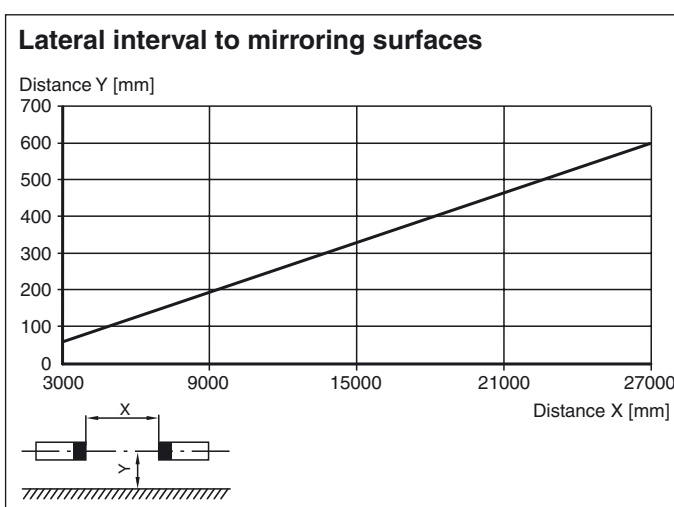
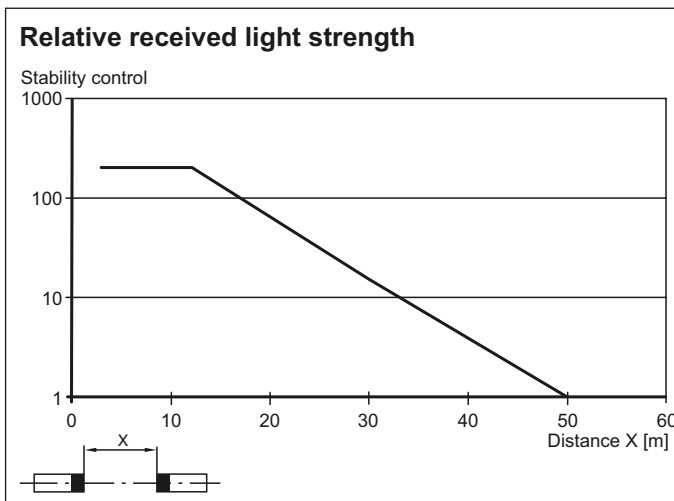
**General information**

System components	
Emitter	SLA12-LAS-T/35/124
Receiver	SLA12-R/124

**Curves/Diagrams**



Release date: 2009-12-14 11:24 Date of issue: 2009-12-14 214721\_ENG.xml



### 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 ≥ 2-fold switching level (function reserve)

Release date: 2009-12-14 11:24 Date of issue: 2009-12-14 21:4721\_ENG.xml