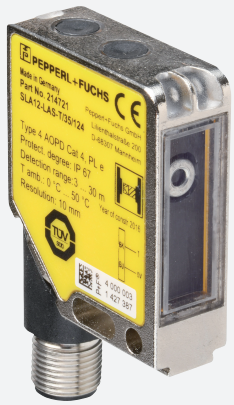
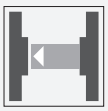


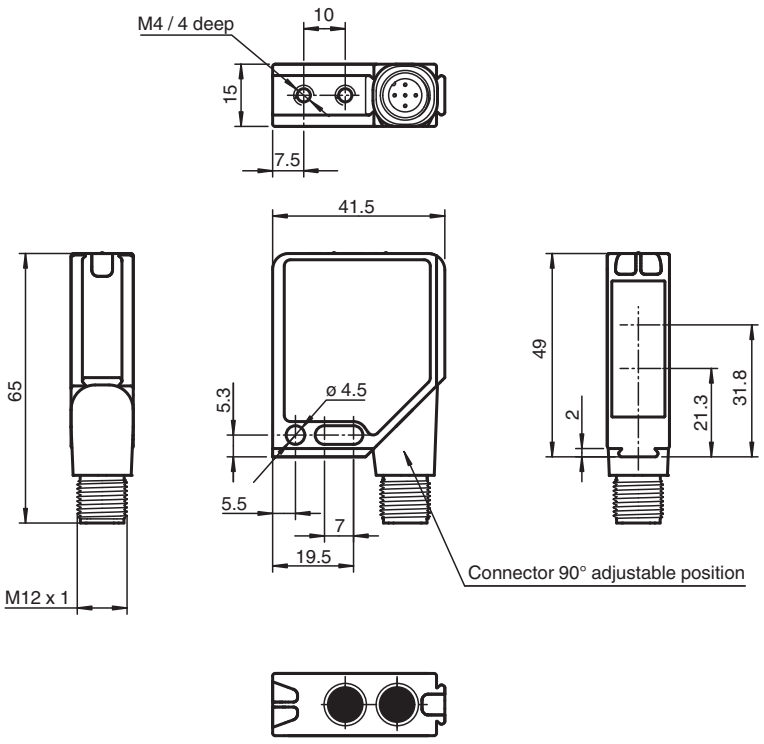
Safety thru-beam sensor transmitter
SLA12-LAS-T/35/124



- Sensing 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, degree of protection IP67
- Operation on control units of SB4 (SafeBox)

Safety thru-beam sensor with laser

Dimensions



Technical Data

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

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Technical Data

General specifications		
Effective detection range		3 ... 30 m
Light source		laser diode
Light type		modulated visible red light
Laser nominal ratings		
Note		LASER LIGHT , DO NOT STARE INTO BEAM
Laser class		1
Wave length		650 nm
Beam divergence		1 mrad
Pulse length		35 µs
Repetition rate		200 Hz
Target size		static: 10 mm dynamic: 30 mm (at v = 1.6 m/s of the obstacle)
Alignment aid		LED red
Opening angle		< 5 °
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 E-10
Type		4
Indicators/operating means		
Operation indicator		LED green
Function indicator		LED yellow: 1. LED lit 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_B	Power supply via control unit
Protection class		III , IEC 61140
Conformity		
Functional safety		ISO 13849-1
Product standard		EN 61496-1 ; IEC 61496-2
Laser safety		IEC 60825-1:2007
Approvals and certificates		
CE conformity		CE
UKCA conformity		UKCA
TÜV approval		TÜV SÜD
Ambient conditions		
Ambient temperature		0 ... 50 °C (32 ... 122 °F)
Storage temperature		-20 ... 70 °C (-4 ... 158 °F)
Relative humidity		max. 95 %, not condensing
Shock resistance		10 g , 16 ms ; stationary applications only
Vibration resistance		1 mm , 10 ... 55 Hz ; stationary applications only
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

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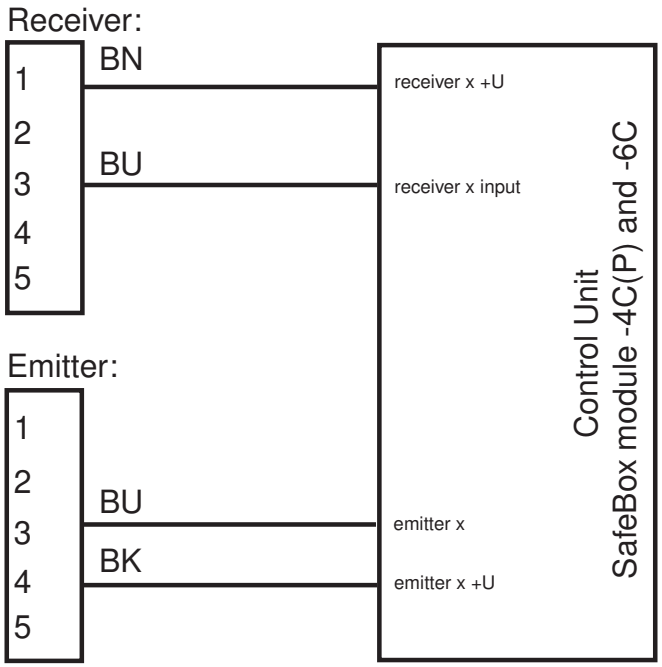
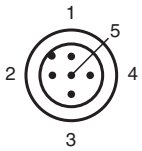
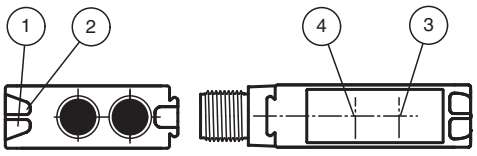
Connection



Connection Assignment



Assembly



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

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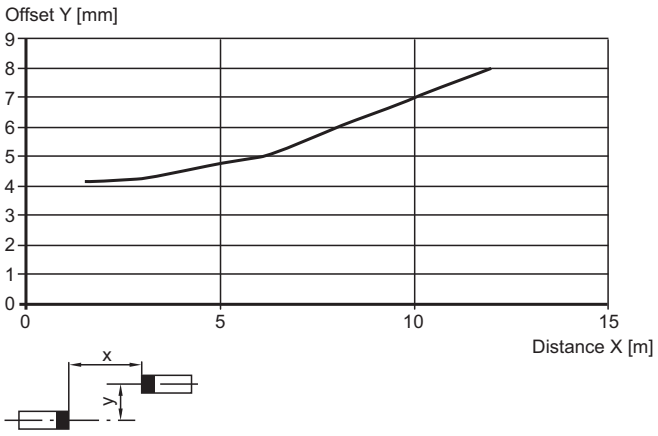
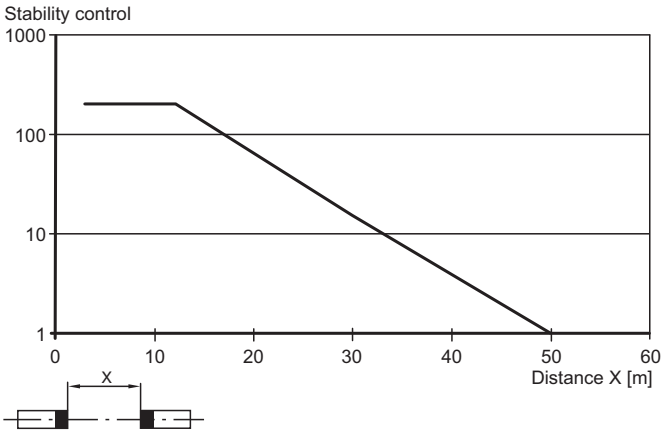
Characteristic Curve

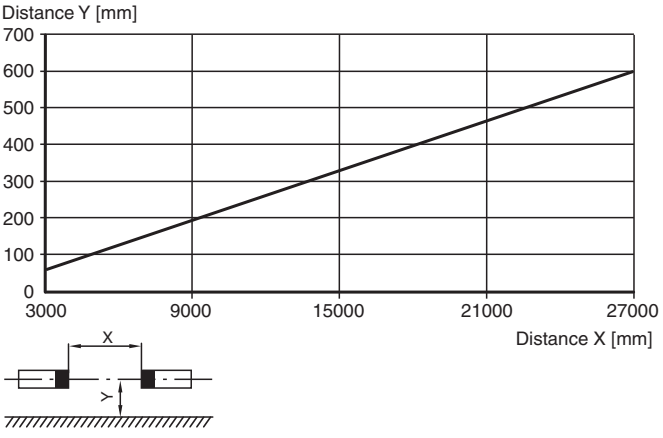
Characteristic response curve



Relative received light strength



Lateral interval to mirroring surfaces



Safety Information

Laser Class 1 Information
The irradiation can lead to irritation especially in a dark environment. Do not point at people!
Maintenance and repairs should only be carried out by authorized service personnel!
Attach the device so that the warning is clearly visible and readable.
The warning accompanies the device and should be attached in immediate proximity to the device.
Caution – Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

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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
	**V15-W-5M-PVC**	Female cordset single-ended M12 angled A-coded, 5-pin, PVC cable grey

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Indication

Additional information

For much easier alignment even for lond distance applications, an additional red LED is located in the receivers 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)

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