



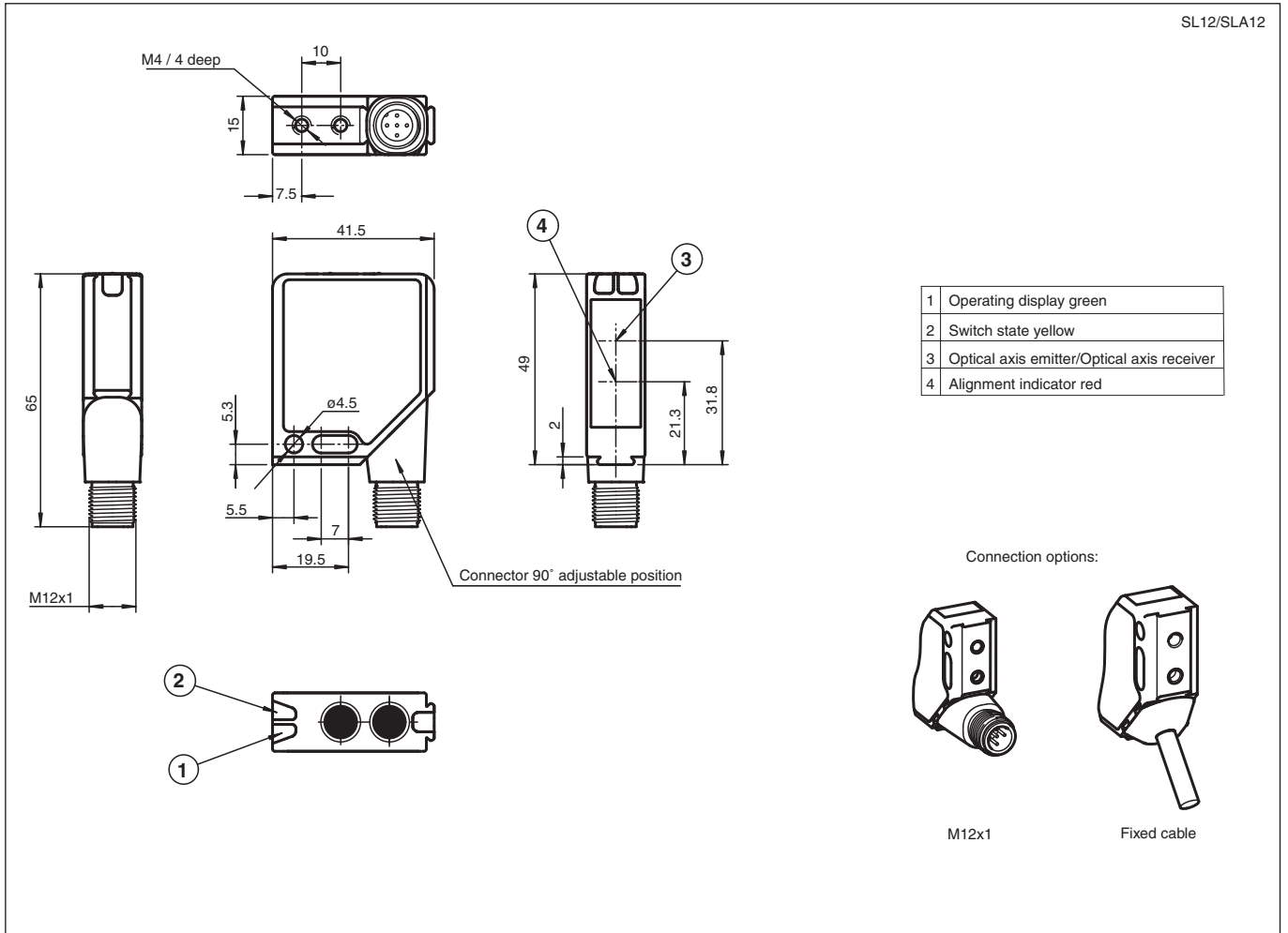
# Safety thru-beam sensor SLA12/115



- 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)



## Dimensions



## Technical Data

### System components

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

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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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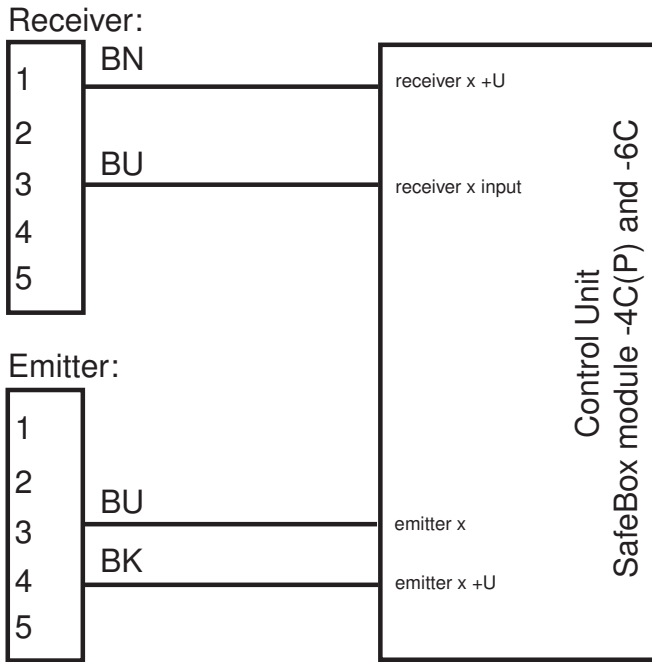
**PEPPERL+FUCHS**

## Technical Data

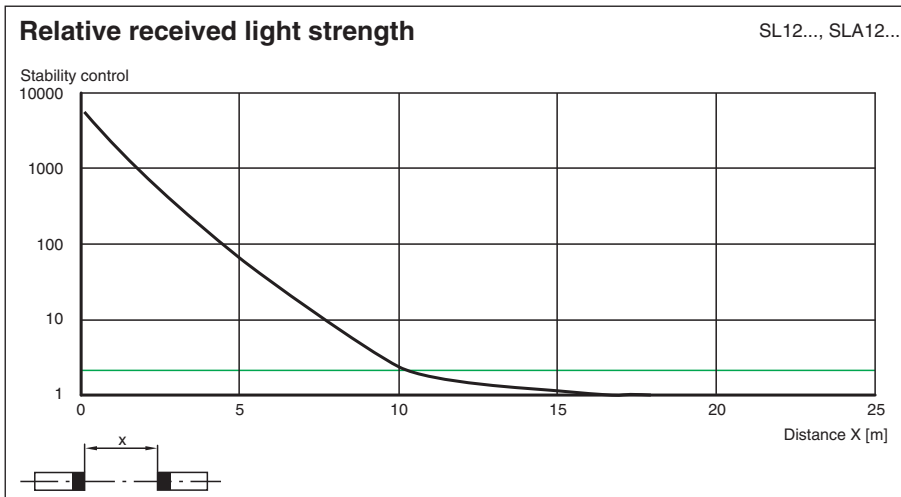
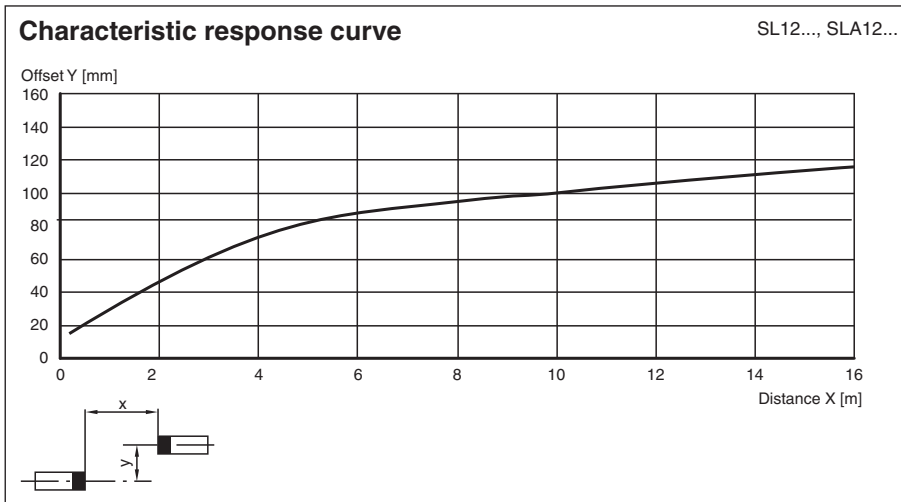
General specifications		
Effective detection range		0.2 ... 10 m
Threshold detection range		16 m
Light source		LED, 660 nm
Light type		modulated visible red light
Target size		static: 10 mm dynamic: 30 mm (at $v = 1.6$ m/s of the obstacle)
Alignment aid		LED red
Angle of divergence		$< 5^\circ$
Functional 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 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
Conformity		
Functional safety		ISO 13849-1
Product standard		EN 61496-1 ; IEC 61496-2
Approvals and certificates		
CE conformity		CE
CCC approval		CCC approval / marking not required for products rated $\leq 36$ V
Approvals		TÜV
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		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)
Optical face		Plastic pane
Mass		per device 60 g

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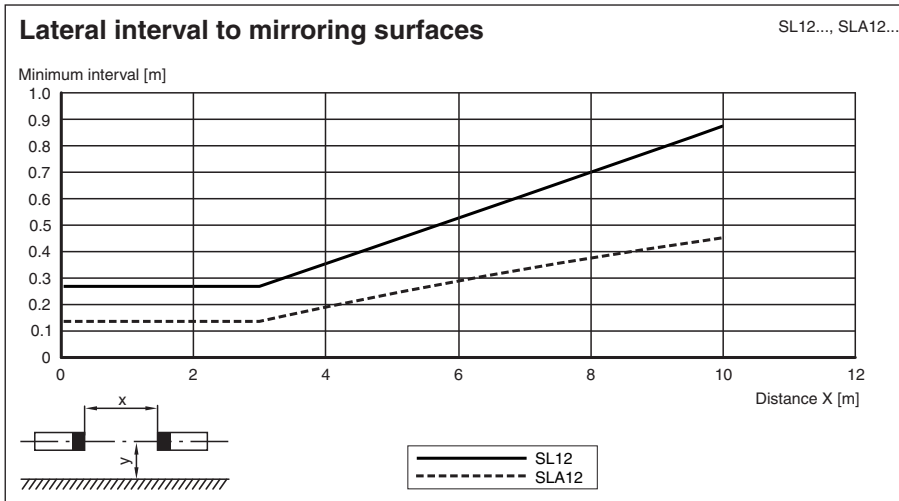
Connection



Characteristic Curve



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## Matching System Components

	<b>SB4-OR-4CP-4M</b>	Safety control unit
	<b>SB4-OR-4CP-4C</b>	Safety control unit
	<b>SB4-OR-4CP-4M-2E</b>	Safety control unit
	<b>SB4-OR-4CP-4C-2E</b>	Safety control unit
	<b>SB4-OR-4CP-2E</b>	Safety control unit
	<b>SB4-OR-4CP-B</b>	SB4 series safety control unit with 1 optional module slot for functional enhancement
	<b>SB4-OR-4CP-B-B-B-B</b>	SB4 series safety control unit with optional module slots for functional enhancement
	<b>SB4-OR-4CP-B-B-B</b>	SB4 series safety control unit with optional module slots for functional enhancement
	<b>SB4-OR-4CP-B-B-B-B-B-B</b>	SB4 series safety control unit with optional module slots for functional enhancement
	<b>SB4-OR-4CP</b>	Safety control unit
	<b>SB4-OR-4CP-B-B</b>	SB4 series safety control unit with optional module slots for functional enhancement
	<b>SC HDM-10 24V</b>	Safety control unit
	<b>SB4-OI1-4CP-4C-4C-4C</b>	Safety control unit
	<b>SC HDM-12 24V</b>	Safety control unit

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## Accessories

	<b>SLA-1-M</b>	Deviation mirror
	<b>OMH-06</b>	Mounting aid for round steel $\varnothing$ 12 mm or sheet 1.5 mm ... 3 mm
	<b>OMH-MLV12-HWG</b>	Mounting bracket for series MLV12 sensors
	<b>OMH-MLV12-HWK</b>	Mounting bracket for series MLV12 sensors
	<b>OMH-K01</b>	dove tail mounting clamp
	<b>OMH-K02</b>	dove tail mounting clamp

## Indication

### Additional information

For much easier alignment even for long 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)

## 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