



Safety thru-beam sensor SLA12/115

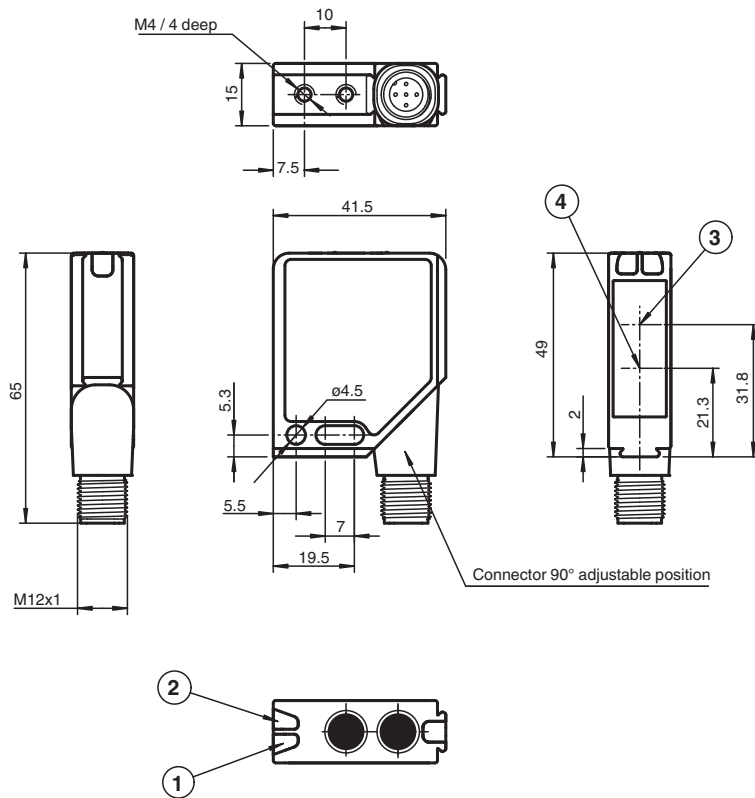


- Sensing range up to 10 m
- Self-monitoring (type 4 according to IEC/EN 61496-1)
- Red transmission light
- Integrated alignment aid
- Clearly visible LED functional display and pre-fault indicator on the receiver
- Sturdy housing
- Waterproof, degree of protection IP67
- Operation on control units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



Dimensions

SL12/SLA12

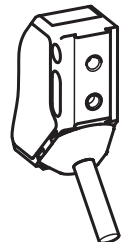


1	Operating display green
2	Switch state yellow
3	Optical axis emitter/Optical axis receiver
4	Alignment indicator red

Connection options:



M12x1



Fixed cable

Technical Data

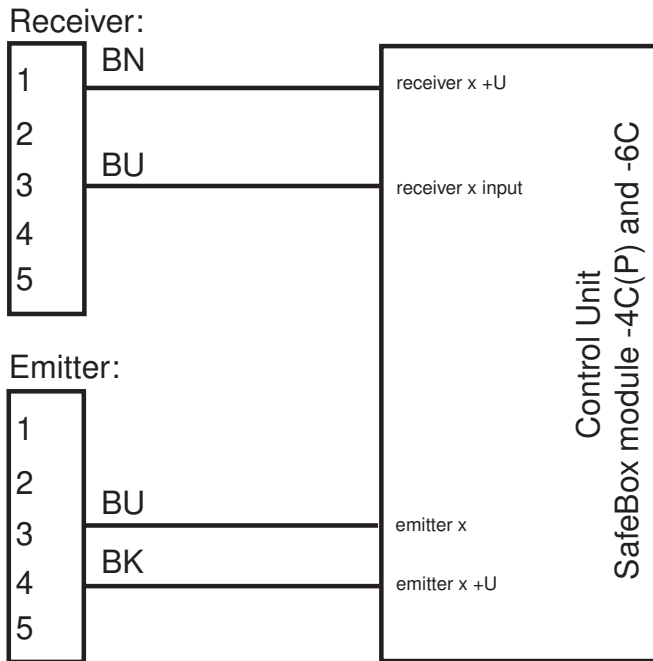
System components	
Emitter	SLA12-T/115
Receiver	SLA12-R/115
General specifications	
Effective detection range	0.2 ... 10 m
Threshold detection range	16 m

Release date: 2023-10-05 Date of issue: 2023-10-05 Filename: 117307_eng.pdf

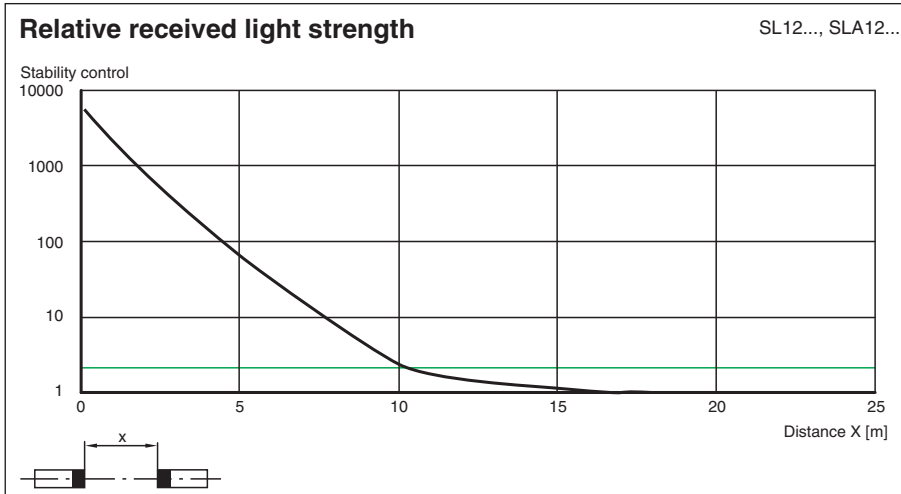
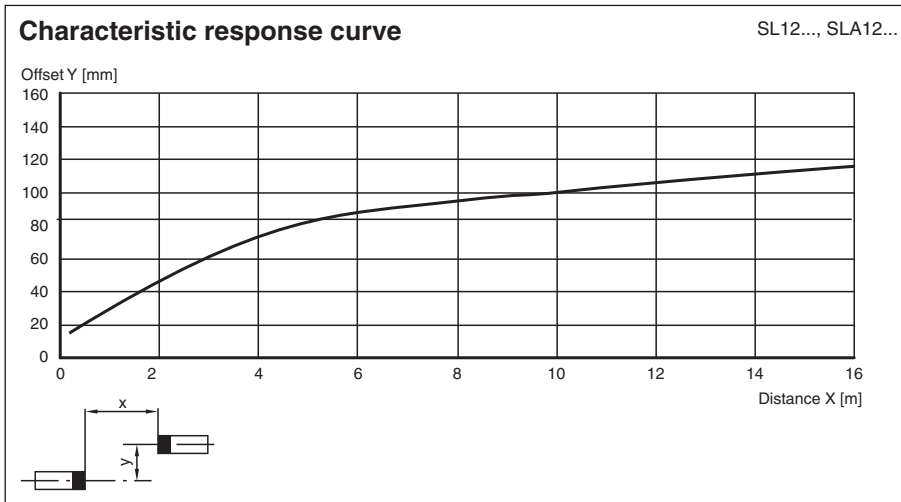
Technical Data

Light source		LED, 660 nm
Light type		modulated visible red light
Laser nominal ratings		
Wave length		
Target size		static: 10 mm dynamic: 30 mm (at $v = 1.6$ m/s of the obstacle)
Alignment aid		LED red
Opening angle		$< 5^\circ$
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
Protection class		III , IEC 61140
Conformity		
Functional safety		ISO 13849-1
Product standard		EN 61496-1 ; IEC 61496-2
Approvals and certificates		
CE conformity		CE
UKCA conformity		UKCA
UL approval		cULus Listed
TÜV approval		TÜV SÜD
Ambient conditions		
Ambient temperature		-20 ... 60 °C (-4 ... 140 °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		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

Connection

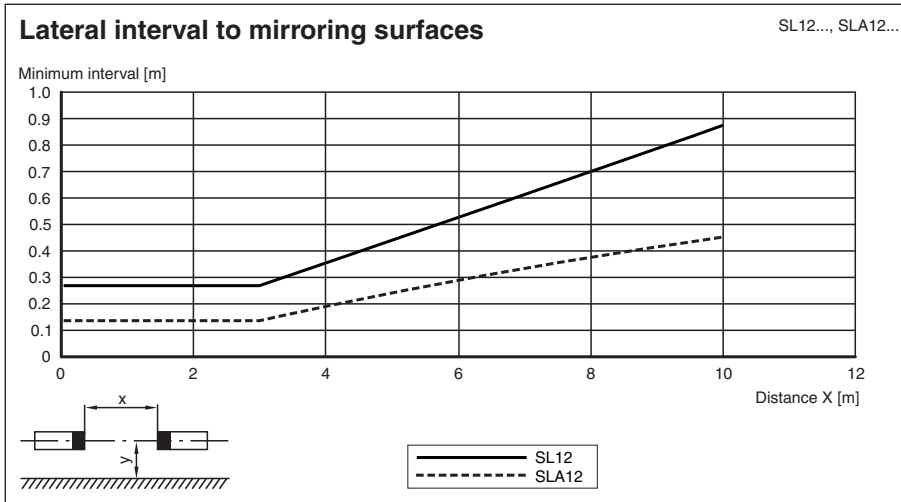


Characteristic Curve



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Characteristic Curve









Matching System Components

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

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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

Indication

Additional information

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