

Safety thru-beam sensor SLA29/116

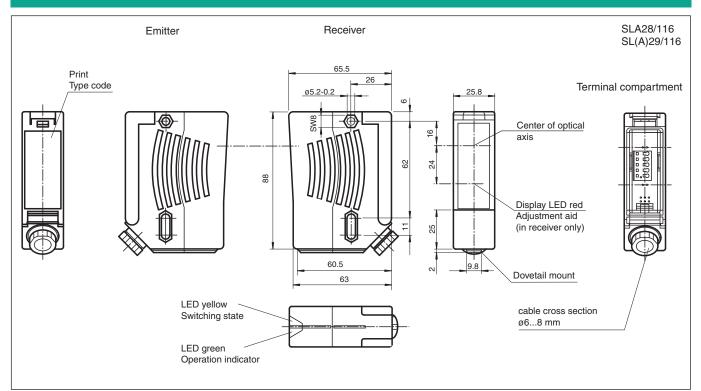


- Sensing range up to 30 m
- Self-monitoring (type 4 according to IEC/EN 61496-1)
- Red transmission light
- Integrated alignment aid
- Clearly visible LED functional display and pre-fault indicator on the receiver
- Sturdy housing
- Waterproof, degree of protection IP67
- Operation on control units of SB4 (SafeBox)





Dimensions



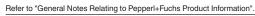
Technical Data

Release date: 2020-11-09 Date of issue: 2020-11-09 Filename: 118440_eng.pdf

System components	
Emitter	SLA29-T/116
Receiver	SLA29-R/116
General specifications	
Effective detection range	0.2 30 m
Threshold detection range	40 m



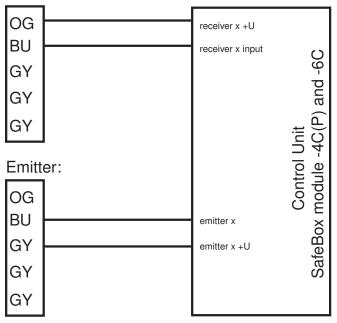
Technical Data		
Light source		LED
Light type		modulated visible red light
Target size		static: 30 mm
raiget size		dynamic: 40 mm (at v = 1.6 m/s of the obstacle)
Alignment aid		LED red in receiver
Angle of divergence		< 5 °
Functional safety related parameters		
Safety Integrity Level (SIL)		SIL 3
Performance level (PL)		PL e
Category		Cat. 4
Mission Time (T _M)		20 a
PFH_d		4.4 E-10
Туре		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 ≤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		terminal compartment
Material		
Housing		ABS plastic, RLA 1021 (yellow) painted
Optical face		Plastic pane



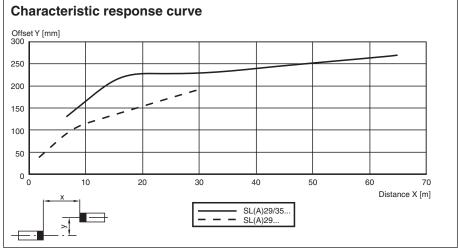
Connection

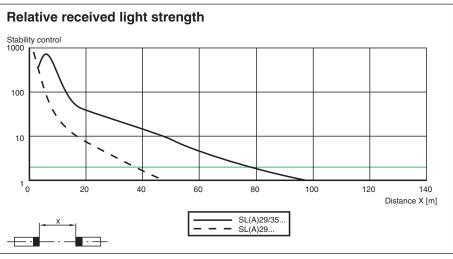
Design with terminal compartment

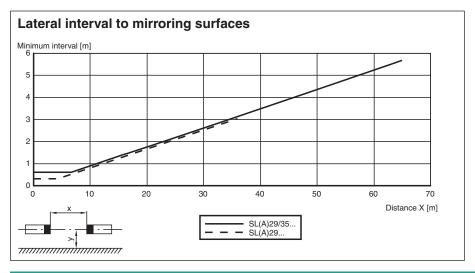
Receiver:



Characteristic Curve







Matching System Components

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

Accessories				
6.	ОМН-05	Mounting aid for round steel ø 12 mm or sheet 1.5 mm 3 mm		
	OMH-21	Mounting bracket		
	OMH-22	Mounting bracket		
*******	MS SLP/SLA28	Fixing plate		
1	MS SLPCM	Mounting bracket		
	SLA-1-M	Deviation mirror		

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)

System accessories

Control units SC4-2

SB4 (SafeBox) Cable sockets

Option /73c:

straight:V1-G-2M-PVC

V1-G-5M-PVC

V1-G-10M-PVC

angled:V1-W-2M-PVC

V1-W-5M-PVC

V1-W-10M-PVC

Option /105:

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

Option /116:no

Mounting aids

OMH-21

OMH-22

OMH-05

OMH-MLV11-K

Further accessories

Laser alignment aid

BA SLA28

Muting Set

MS SLP/SLA28

Redirection mirror

SLA-1-M