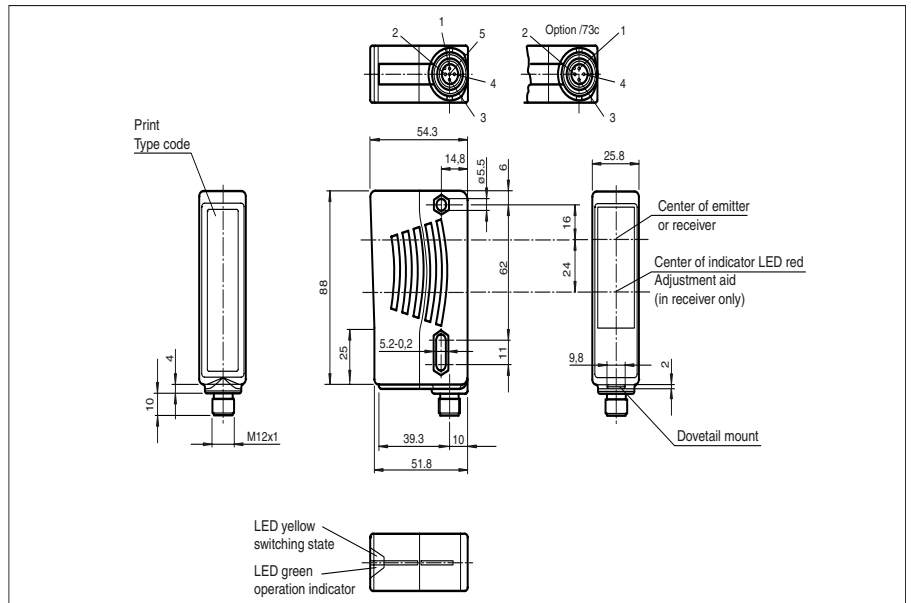




Dimensions



Model Number

SLA29/105/106

Safety thru-beam sensor
with 5-pin, M12 connector

Features

- Detection range up to 30 m
- Self-monitoring (type 4 according to IEC/EN 61496-1)
- Extended temperature range up to -35 °C with heated front panel
- Red transmission light
- Integrated alignment aid
- Clearly visible LED functional display and pre-fault indicator on the receiver
- Operation on control units of series SB4 (SafeBox) and SC4-2

Accessories

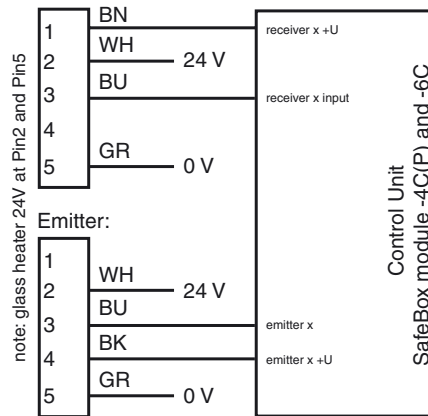
- OMH-05**
Mounting aid
- OMH-21**
Mounting aid
- OMH-22**
Mounting aid
- OMH-MLV11-K**
Mounting aid
- BA SLA28**
Mounting aid Safety
- MS SLP/SLA28**
Mounting aid Safety
- MS SLPCM**
Mounting aid Safety
- SLA-1-M**

Additional accessories can be found in the Internet.

Electrical connection

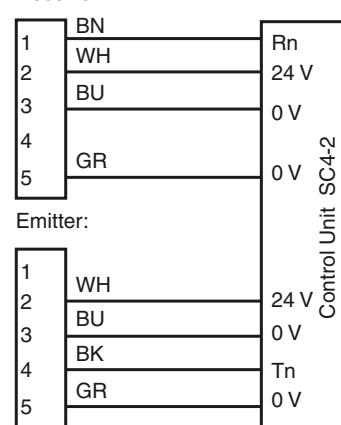
Design with connector (Option /106)

Receiver:

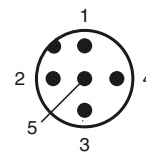


Design with connector (Option /106)

Receiver:



Pinout



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Technical data

General specifications

Effective detection range	0.2 ... 30 m
Threshold detection range	40 m
Light source	LED
Light type	red, modulated light
Approvals	TÜV; cULus (in operation with control unit SafeBox SB4)
Tests	IEC/EN 61496
Safety type according to IEC/EN 61496	4
Marking	CE
Obstacle size	static: 30 mm 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	0.44 E-9

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 _B	Power supply via control unit
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Ambient conditions

Ambient temperature	-35 ... 55 °C (238 ... 328 K) with heated optical face, fixed voltage 24 V DC ± 20 %/50 mA	
Storage temperature	-20 ... 70 °C (253 ... 343 K)	
Relative humidity	max. 95 %, not condensing	

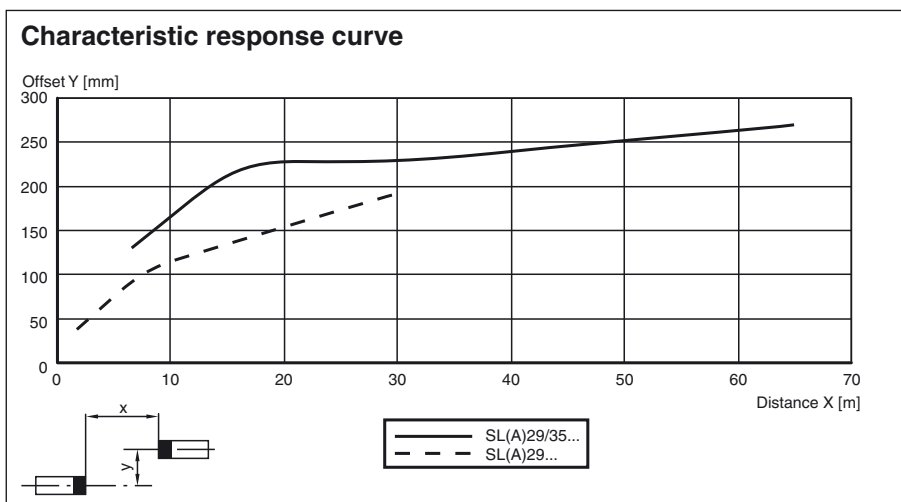
Mechanical specifications

Protection degree	IP67 according to EN 60529	
Connection	M12 connector, 5 pin	
Material		
Housing	ABS plastic, RLA 1021 (yellow) painted	
Optical face	Plastic pane	
Mass	per device 70 g	

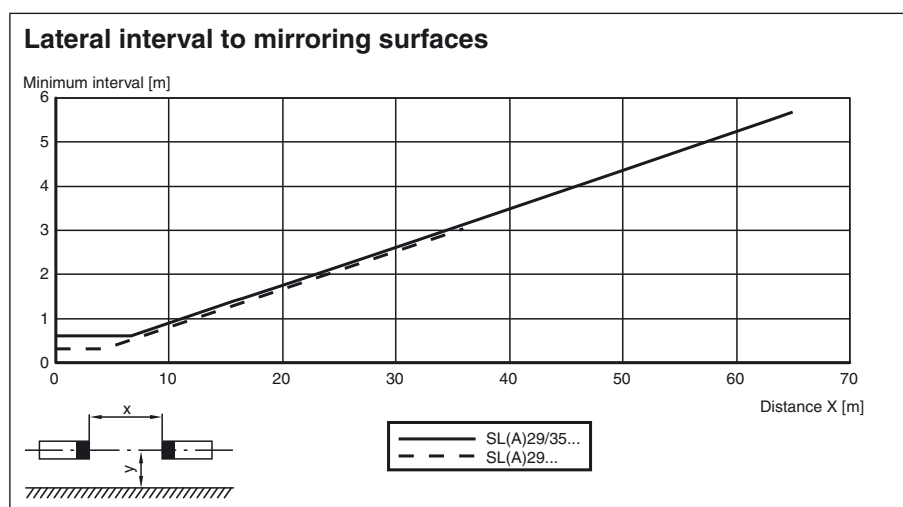
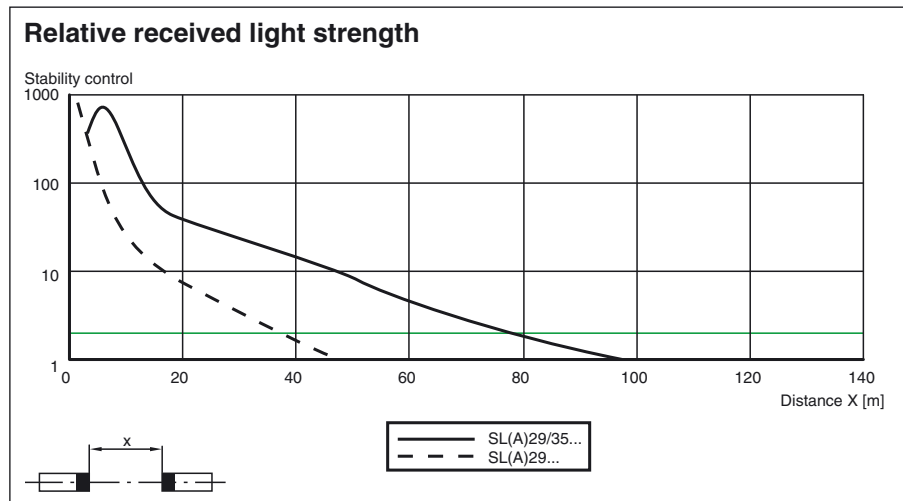
General information

System components		
Emitter	SLA29-T/105/106	
Receiver	SLA29-R/105/106	

Curves/Diagrams



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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 \geq 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:

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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