



Model Number

SLA29/106/116

Safety thru-beam sensor with terminal compartment

Features

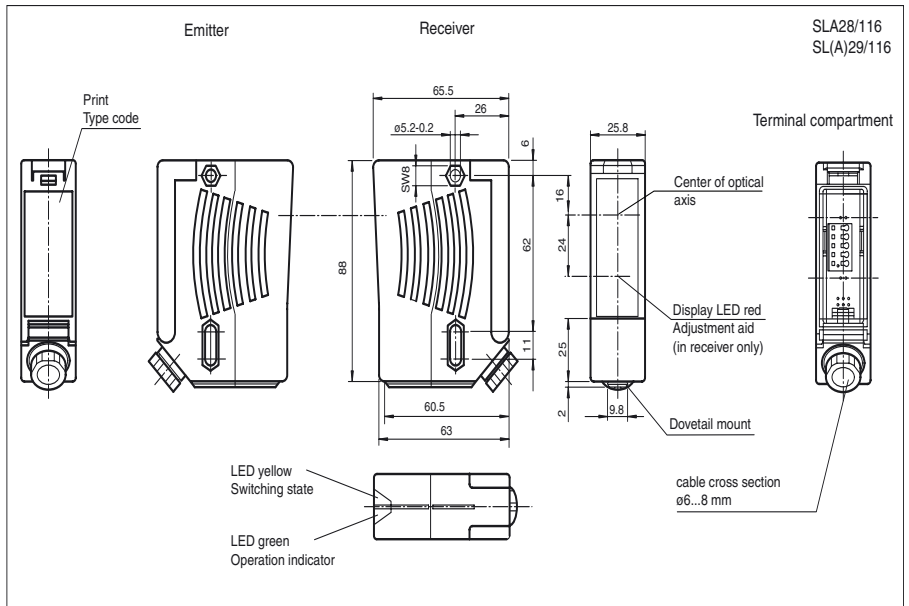
- Detection range up to 30 m
- Self-monitoring (type 4 according to IEC/EN 61496-1)
- Red transmission light
- Integrated alignment aid
- Clearly visible LED functional display and pre-fault indicator on the receiver
- Sturdy housing
- Waterproof, protection class IP67
- Extended temperature range up to -35 °C with heated front panel
- 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**

Additional accessories can be found in the Internet.

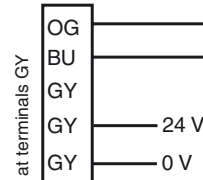
Dimensions



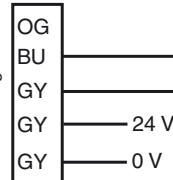
Electrical connection

Design with terminal compartment (Option /106) Design with terminal compartment (Option /106)

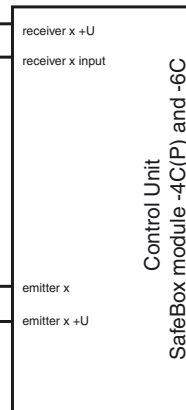
Receiver:



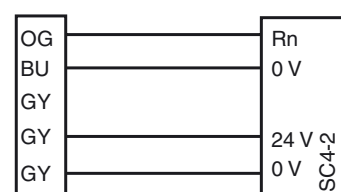
Emitter:



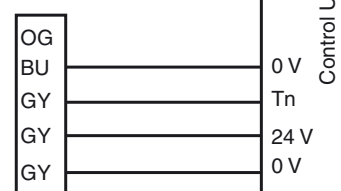
note: glass heater 24V at terminals GY



Receiver:



Emitter:



Control Unit SC4-2

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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 |
| 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 |
|-------------------|----------------|-------------------------------|

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 | |

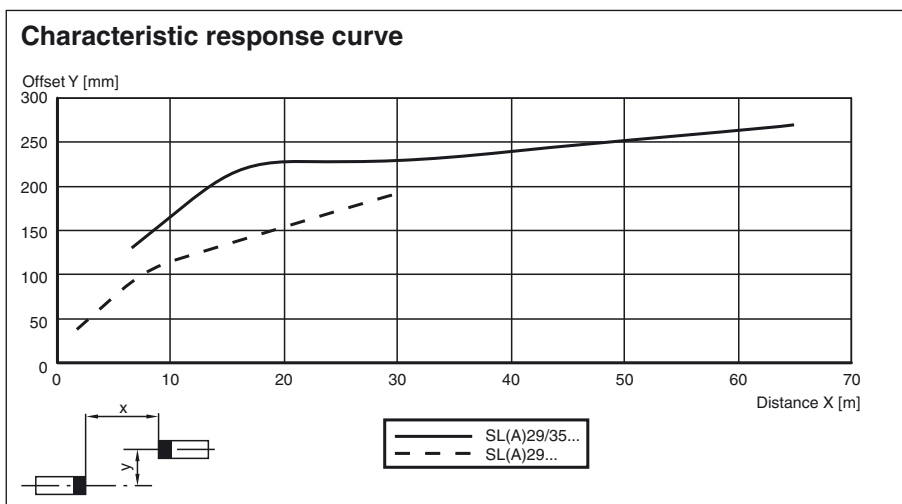
Mechanical specifications

| | | |
|-------------------|--|--|
| Protection degree | IP67 according to EN 60529 | |
| Connection | terminal compartment | |
| Material | | |
| Housing | ABS plastic, RLA 1021 (yellow) painted | |
| Optical face | Plastic pane | |
| Mass | per device 70 g | |

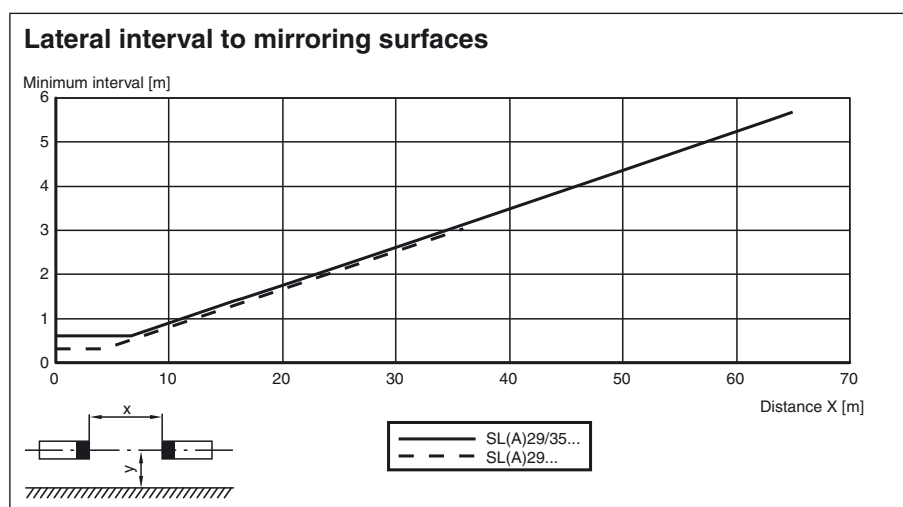
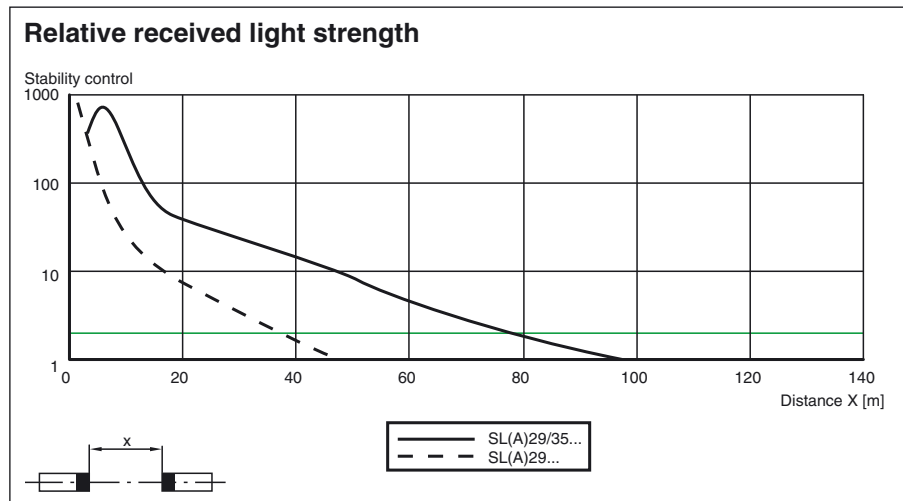
General information

| | | |
|-------------------|-----------------|--|
| System components | | |
| Emitter | SLA29-T/106/116 | |
| Receiver | SLA29-R/106/116 | |

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