

Safety thru-beam sensor

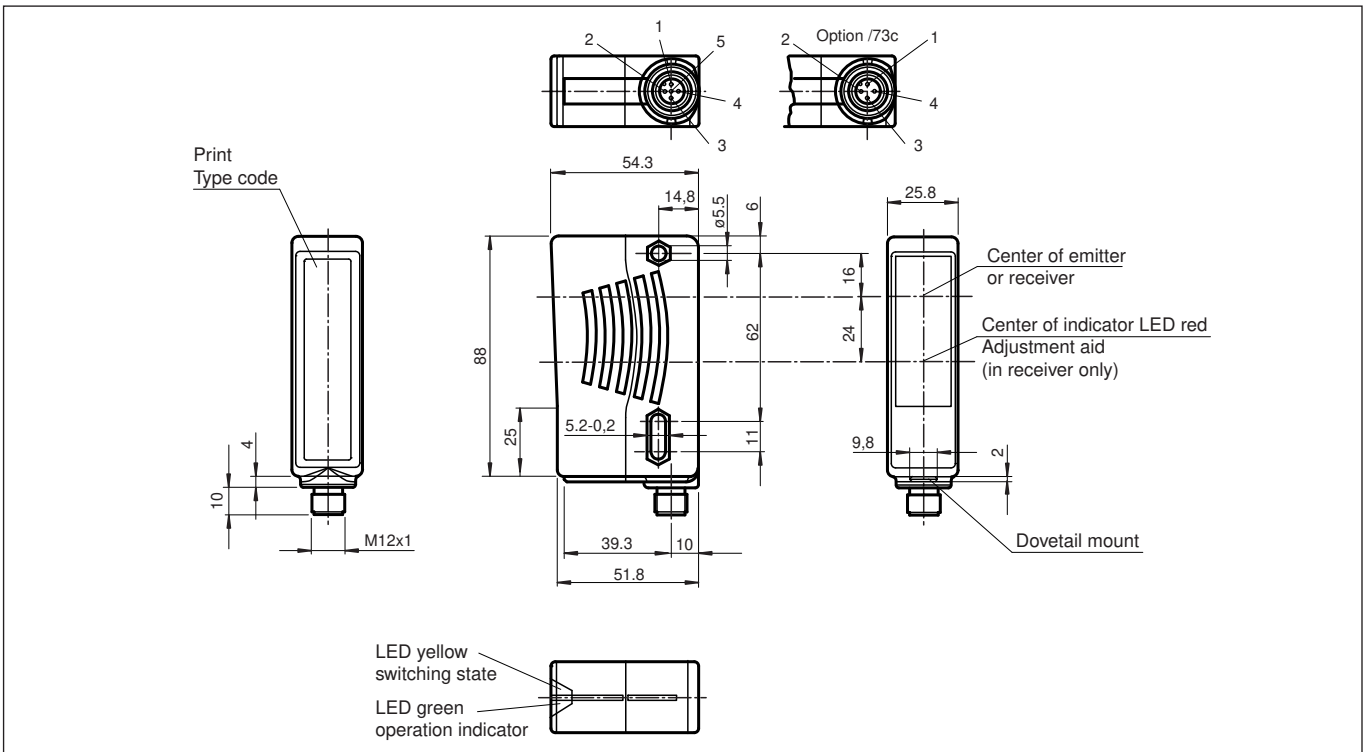
SLA29/73c



- 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 SB4-series control units (SafeBox)



Dimensions



Technical Data

| System components | |
|---------------------------|--|
| Emitter | SLA29-T/73c |
| Receiver | SLA29-R/73c |
| General specifications | |
| Effective detection range | 0.2 ... 30 m |
| Threshold detection range | 40 m |
| Light source | LED |
| Light type | modulated visible red light |
| Target size | static: 30 mm dynamic: 40 mm (at v = 1.6 m/s of the obstacle) |

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

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Technical Data

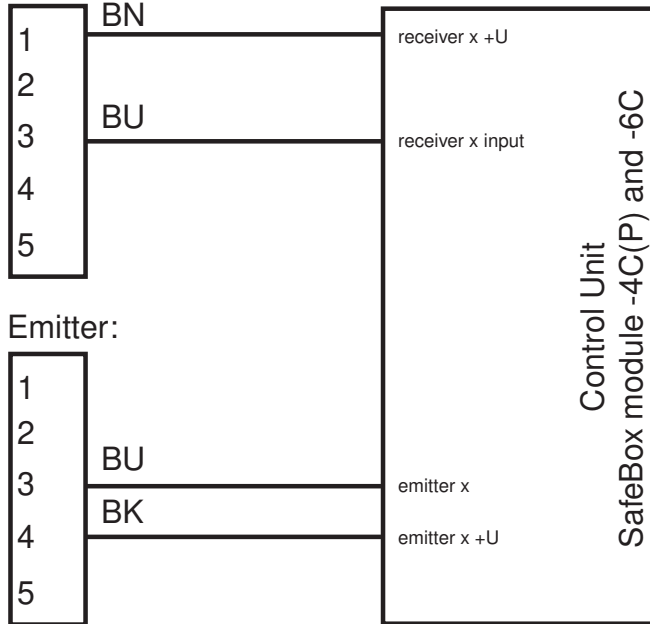
| | | |
|---|---|-------------------------------|
| Alignment aid | LED red in receiver | |
| Opening angle | < 5 ° | |
| Functional safety related parameters | | |
| Safety Integrity Level (SIL) | SIL 3 | |
| Performance level (PL) | PL e | |
| Category | Cat. 4 | |
| Mission Time (T _M) | 20 a | |
| PFH _d | 4.4 E-10 | |
| 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 | M12 connector, 4-pin | |
| Material | | |
| Housing | ABS plastic, RLA 1021 (yellow) painted | |
| Optical face | Plastic pane | |
| Mass | per device 70 g | |

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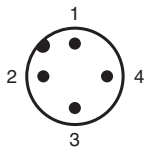
Connection

Design with connector

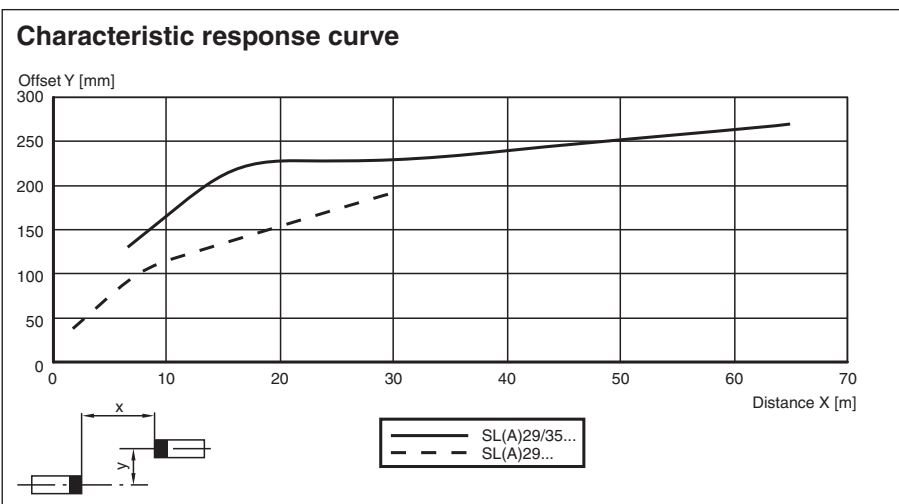
Receiver:



Connection Assignment



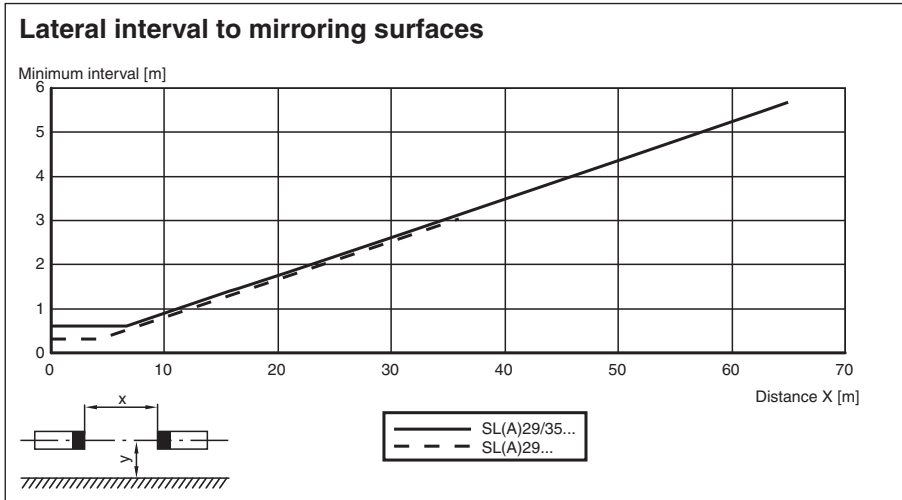
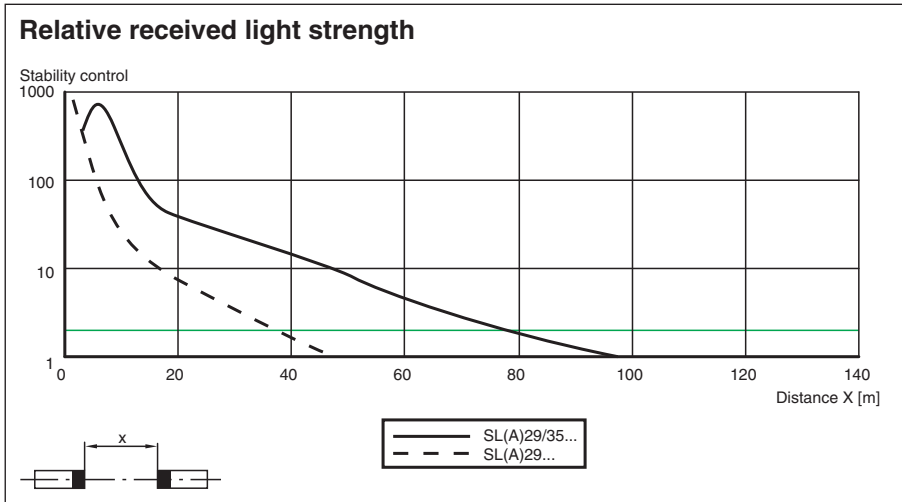
Characteristic Curve



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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-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 |





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Matching System Components

| | | |
|---|-----------------------------|--|
|  | SB4-OR-4CP-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

| | | |
|---|----------------|---|
|  | OMH-05 | Mounting aid for round steel \varnothing 12 mm or sheet 1.5 mm ... 3 mm |
|  | OMH-21 | Mounting bracket: mounting aid for sensors in the RL* series |
|  | OMH-22 | Mounting aid for RL* series |
|  | SLA-1-M | Deviation mirror |

Indication

Additional information

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