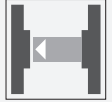


Safety thru-beam sensor SLA12/124

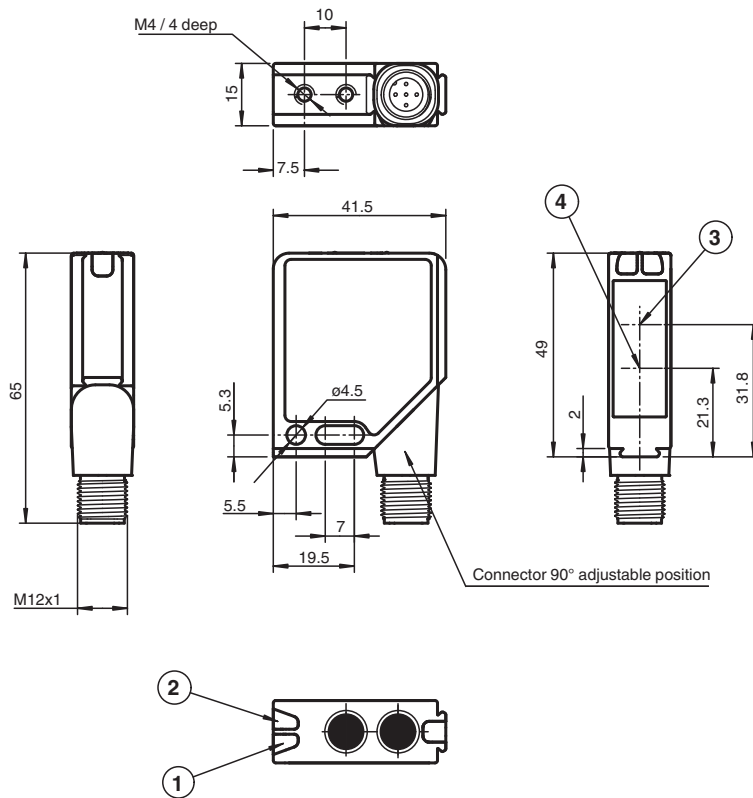


- Sensing range up to 10 m
- Self-monitoring (type 4 according to IEC/EN 61496-1)
- Red transmission light
- Integrated alignment aid
- Clearly visible LED functional display and pre-fault indicator on the receiver
- Sturdy housing
- Waterproof, degree of protection IP67
- Operation on control units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



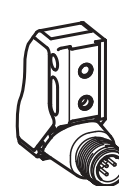
Dimensions

SL12/SLA12

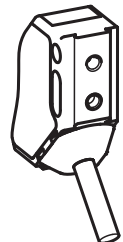


| | |
|---|--------------------------------------------|
| 1 | Operating display green |
| 2 | Switch state yellow |
| 3 | Optical axis emitter/Optical axis receiver |
| 4 | Alignment indicator red |

Connection options:



M12x1



Fixed cable

Technical Data

System components

| | |
|----------|-------------|
| Emitter | SLA12-T/124 |
| Receiver | SLA12-R/124 |

General specifications

| | |
|---------------------------|--------------|
| Effective detection range | 0.2 ... 10 m |
| Threshold detection range | 16 m |

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

Pepperl+Fuchs Group
www.pepperl-fuchs.com

USA: +1 330 486 0001
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 1111
fa-info@de.pepperl-fuchs.com

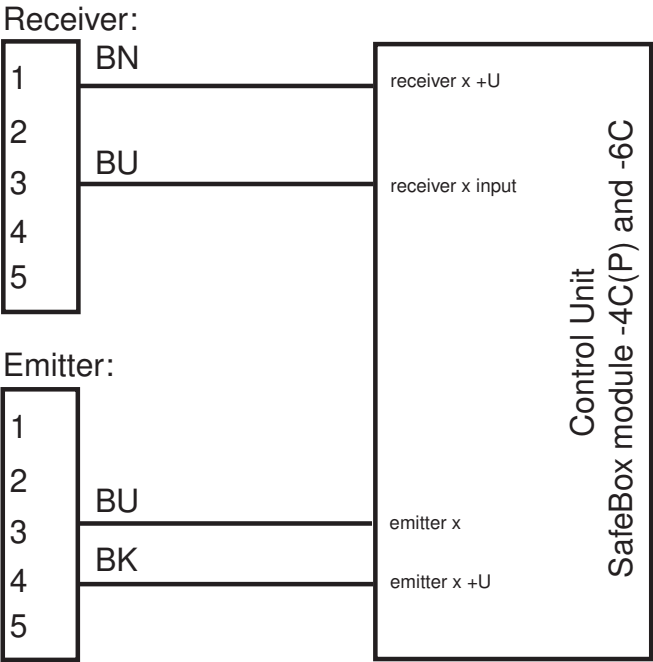
Singapore: +65 6779 9091
fa-info@sg.pepperl-fuchs.com

PEPPERL+FUCHS

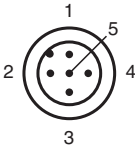
Technical Data

| | | |
|---------------------------------------------|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Light source | | LED, 660 nm |
| Light type | | modulated visible red light |
| Target size | | static: 10 mm dynamic: 30 mm (at v = 1.6 m/s of the obstacle) |
| Alignment aid | | LED red |
| 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 | | 5-pin M12 x 1 connector with metal thread, 90° rotatable |
| 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 |
| Dimensions | | |
| Height | | 49 mm |
| Width | | 41.5 mm |
| Depth | | 15 mm |

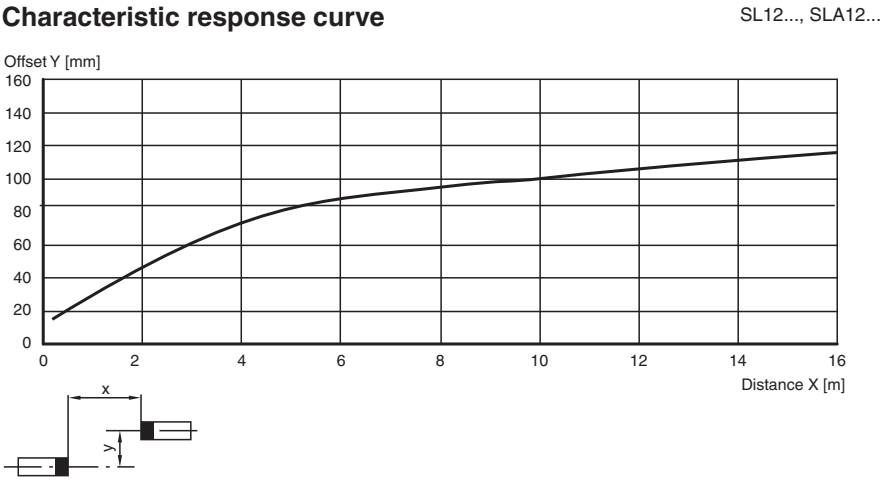
Connection



Connection Assignment

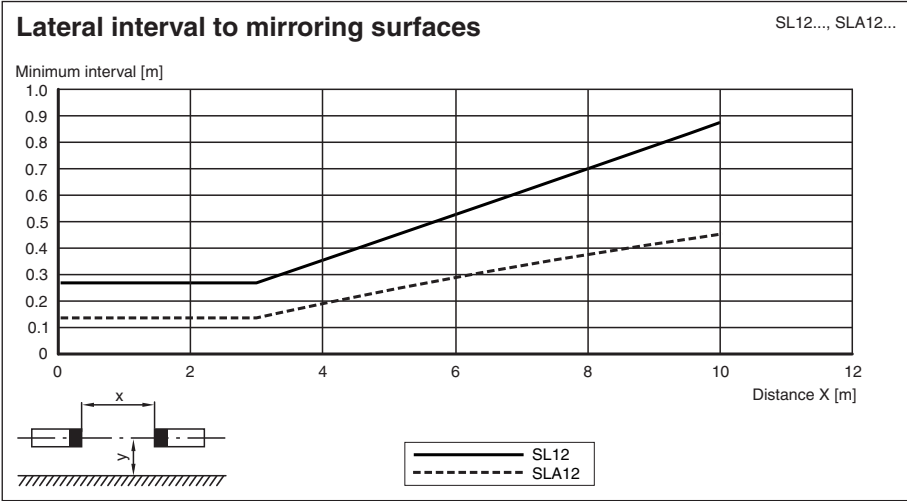
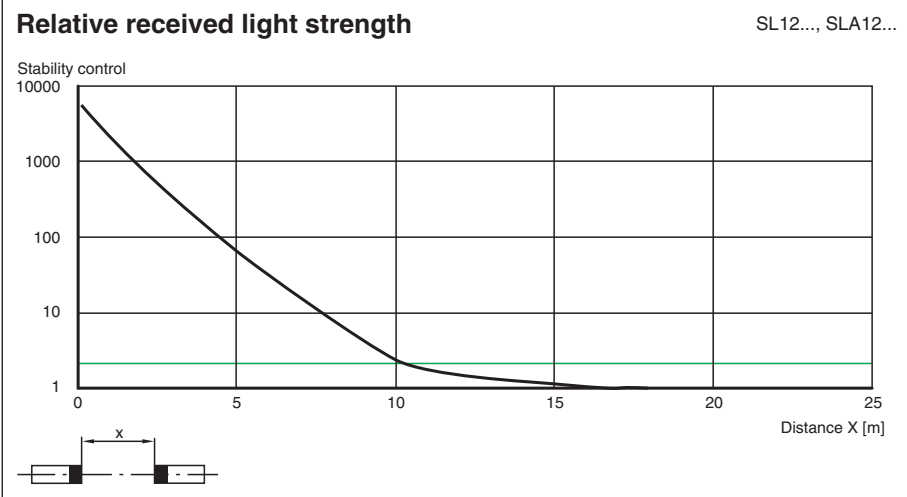


Characteristic Curve



Release date: 2024-06-24 Date of issue: 2024-06-24 Filename: 117306_eng.pdf

Characteristic Curve



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 (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