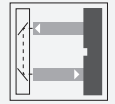




# Safety light grid with integrated control unit

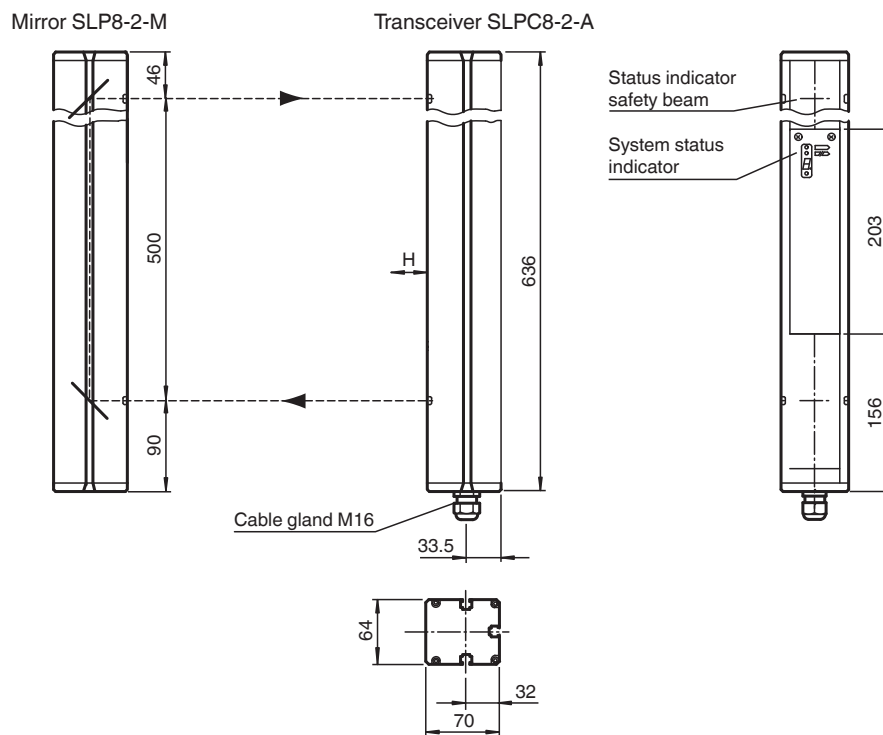


## SLPC8-2/31

- Sensing range up to 8 m
- 2-radial design
- Beam spacing 500 mm
- Self-monitoring (type 4 according to IEC/EN 61496-1)
- Minimum wiring expense due to transceiver with passive mirror column
- Red transmission light
- Usable with or without start/restart disable
- Integrated relay monitor
- 7-segment diagnostic display
- Pre-fault indication
- OSSD outputs as semiconductor or relay outputs



## Dimensions



## Technical Data

| System components         |                             |
|---------------------------|-----------------------------|
| Transceiver               | SLPC8-2-A/31                |
| Mirror pillar             | SLP8-2-M                    |
| General specifications    |                             |
| Effective detection range | 0.2 ... 8 m                 |
| Light source              | LED                         |
| Light type                | modulated visible red light |

Release date: 2020-08-27 Date of issue: 2020-10-06 Filename: 111852\_eng.pdf

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

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## Technical Data

|   |  |   |
|---|--|---|
| Tests                                       | IEC/EN 61496   |   |
| Safety type according to IEC/EN 61496       | 4  |   |
| Marking                                     | CE   |   |
| Target size                                 | static: 32 mm<br>dynamic: 50 mm (at v = 1.6 m/s of the obstacle)   |   |
| Beam spacing                                | 500 mm   |   |
| Number of beams                             | 2  |   |
| Operating mode                              | Start/restart disable, relay monitor,  |   |
| Angle of divergence                         | < 5 °  |   |
| <b>Functional safety related parameters</b> |  |   |
| Performance level (PL)                      | PL e   |   |
| Category                                    | Cat. 4   |   |
| Mission Time (T <sub>M</sub> )              | 20 a   |   |
| PFH <sub>d</sub>                            | 3.54 E-9   |   |
| B <sub>10d</sub>                            | see instruction manuals  |   |
| Type  | 4  |   |
| <b>Indicators/operating means</b>           |  |   |
| Diagnostics indicator                       | 7-segment display  |   |
| Function indicator                          | LED red: per receiver channel<br>off: interruption<br>flashes: receiver<br>continuously on: reception with sufficient stability control<br>on the front plate: LED red: OSSD off<br>LED green: OSSD on |   |
| Pre-fault indicator                         | LED red next to receiver flashes   |   |
| Control elements                            | 10 DIP switch in transceiver terminal compartment  |   |
| <b>Electrical specifications</b>            |  |   |
| Operating voltage                           | U <sub>B</sub>   | 24 V DC -15% / +25% , galvanically isolated |
| No-load supply current                      | I <sub>0</sub>   | max. 250 mA                                 |
| Protection class                            | III , IEC 61140  |   |
| <b>Input</b>                                |  |   |
| Activation current                          | approx. 10 mA  |   |
| Activation time                             | 0.03 ... 1 s   |   |
| Test input                                  | Reset-input for system test  |   |
| Function input                              | Relay monitor, start release   |   |
| <b>Output</b>                               |  |   |
| Pre-fault indication output                 | 1 PNP, +U <sub>B</sub> -2 V, max. 300 mA   |   |
| Safety output                               | 2 relay outputs, force-guided NO-contact   |   |
| Signal output                               | 1 PNP each, max. 300 mA for start readiness, OSSD on, OSSD off   |   |
| Switching voltage                           | 20 ... 60 V DC, 12 ... 25 V AC <sub>rms</sub>  |   |
| Switching current                           | 0.01 ... 2 A   |   |
| Switching power                             | 100 VA   |   |
| Response time                               | 40 ms  |   |
| <b>Conformity</b>                           |  |   |
| Functional safety                           | ISO 13849-1  |   |
| Product standard                            | EN 61496-1 ; IEC 61496-2   |   |
| <b>Approvals and certificates</b>           |  |   |
| CE conformity                               | CE   |   |
| Approvals                                   | TÜV SÜD  |   |
| <b>Ambient conditions</b>                   |  |   |
| Ambient temperature                         | 0 ... 50 °C (32 ... 122 °F)  |   |
| Storage temperature                         | -20 ... 70 °C (-4 ... 158 °F)  |   |
| Relative humidity                           | max. 95 % , not condensing   |   |
| <b>Mechanical specifications</b>            |  |   |
| Degree of protection                        | IP65   |   |

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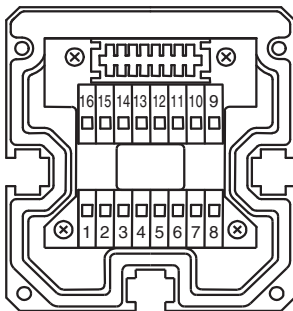
**PEPPERL+FUCHS**

**Technical Data**

|                    |  |
|--------------------|--|
| Connection         | M16 cable gland , terminal compartment with cage-terminals   |
| Connection options | Further electrical connection options on request:<br>Connector DIN 43 651 Hirschmann, emitter: 6-pin+PE, receiver: 11-pin+PE |
| Material           |  |
| Housing            | extruded aluminum profile, RAL 1021 (yellow) coated  |
| Optical face       | Plastic pane   |
| Mass               | Per 2300 g   |

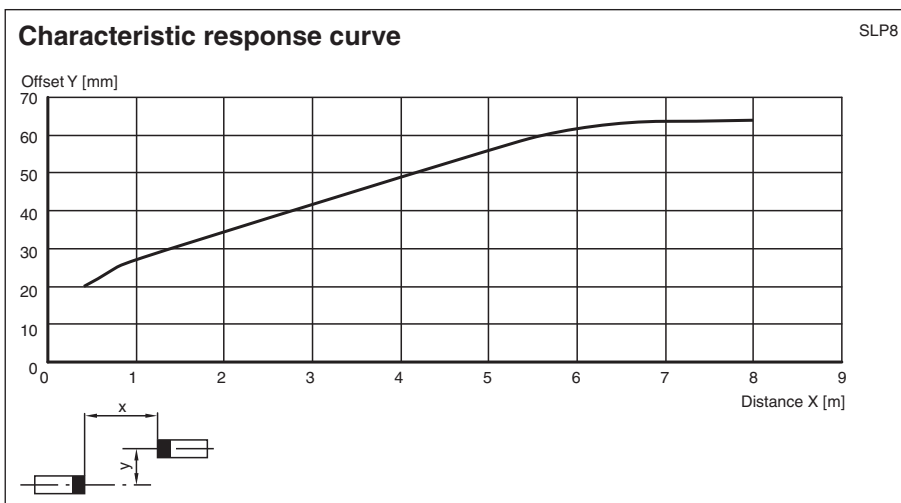
**Connection**

Transceiver SLPC8-2-A



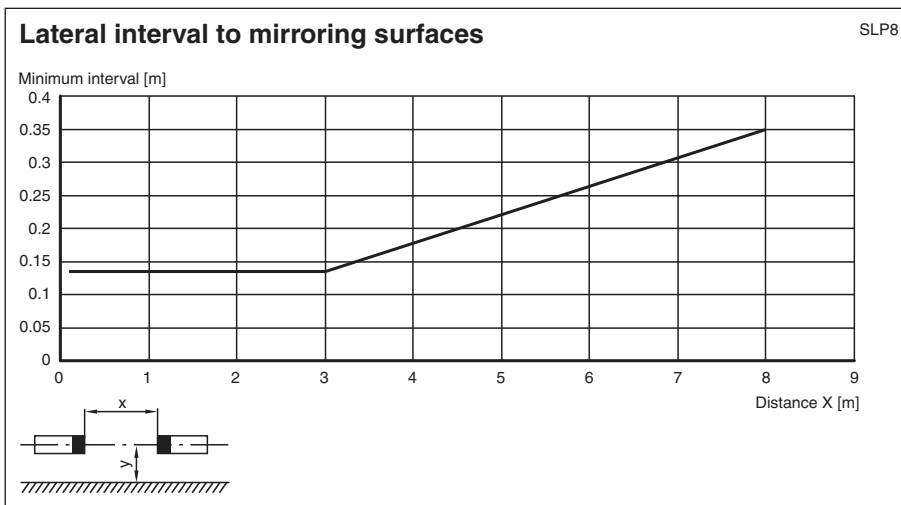
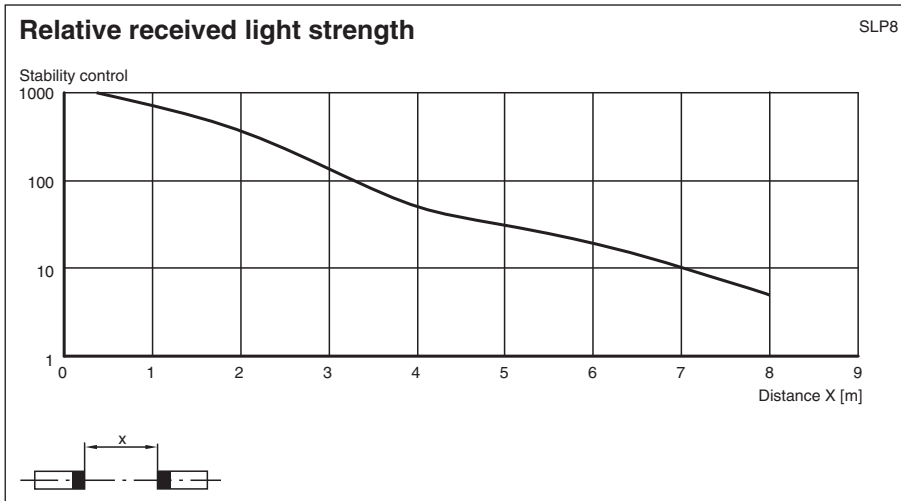
| Transceiver SLPC... (semiconductor output)             | Transceiver SLPC.../31 (relay output)  |
|--|--|
|  | 1 - Functional earth<br>2 - 0 V<br>3 - 24 V  |
| 4 - n.c.<br>5 - -<br>6 - +<br>7 - OSSD 1<br>8 - OSSD 2 |  |
|  | 9 - Input, Relay monitor<br>10 - Input, Start release<br>11 - Input, Reset<br>12 - PNP-output, Soiled optics<br>13 - n.c.<br>14 - PNP-output, Startup readiness<br>15 - PNP-output, Indicator OSSD OFF<br>16 - PNP-output, Indicator OSSD ON |

**Characteristic Curve**










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## Accessories

|   |                             |  |
|---|-----------------------------|--|
|  | <b>PG SLP-2</b>             | Protective glass panes for SLP series                              |
|  | <b>PA SLP/SLC</b>           | Alignment aid for SLP and SLC series profile light grids           |
|  | <b>MS SLP</b>               | Mounting bracket for Light grid                                    |
|  | <b>Damping UC SLP/SLC</b>   | Shock absorber as ramming protector for all series SLP/SLC devices |
|  | <b>Enclosure UC SLP/SLC</b> | Housing for floor stand  |
|  | <b>UC SLP/SLC</b>           | Floor stand for all series SLP/SLC devices                         |
|  | <b>SLP-2-M</b>              | Deviation mirror for SLP   |

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