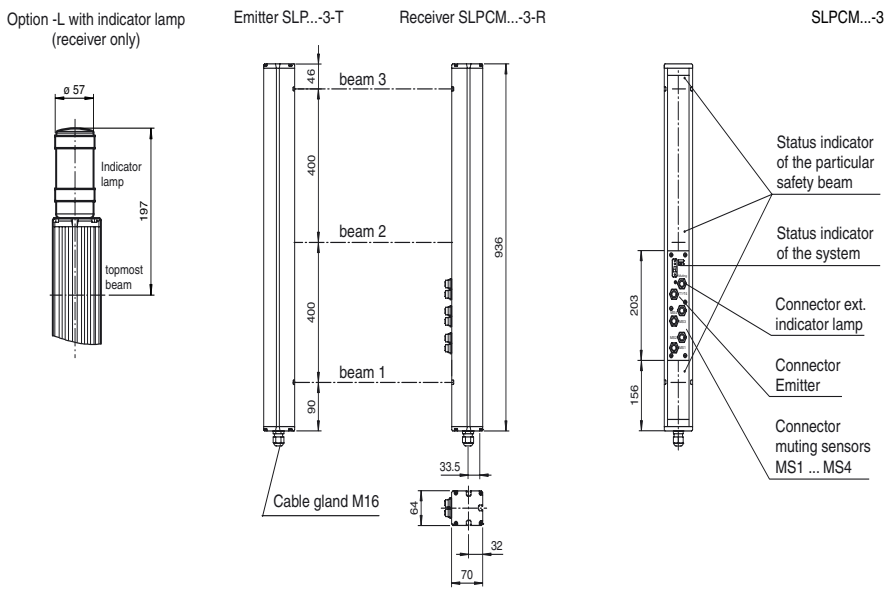




**Dimensions**



**Model Number**

**SLPCM30-3-L**

with 2 separate fail-safe semiconductor outputs

**Features**

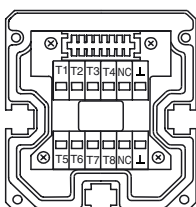
- Sensing range up to 30 m
- 3-radial design
- Beam spacing 400 mm
- Self-monitoring (type 4 according to IEC/EN 61496-1)
- Red transmission light
- Usable with or without start/restart disable
- Sequential and parallel muting in various operating modes
- Emergency muting for the correction of the material jam
- Integrated relay monitor
- 7-segment diagnostic display
- Integrated function display
- Pre-fault indication
- OSSD outputs as semiconductor or relay outputs

**Accessories**

**PG SLP-3**  
Protective glass panes for SLP series

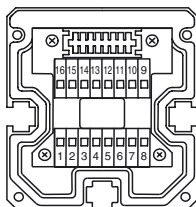
**Electrical connection**

Emitter SLP



- T1 - Emitter channel 1
- T2 - Emitter channel 2
- T3 - Emitter channel 3
- L - 0 V

Receiver SLPCM



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

Release date: 2018-01-03 08:59 Date of issue: 2018-01-03 11:4888\_eng.xml

**Technical data****System components**

|          |               |
|----------|---------------|
| Emitter  | SLP30-3-T     |
| Receiver | SLPCM30-3-R-L |

**General specifications**

|                                       |  |
|---------------------------------------|--|
| Effective detection range             | 6 ... 30 m   |
| Light source                          | LED  |
| Light type                            | modulated visible red light                                      |
| 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                          | 400 mm   |
| Number of beams                       | 3  |
| Operating mode                        | Start/restart disable, relay monitor, muting operating modes     |
| Angle of divergence                   | < 5 °  |

**Functional safety related parameters**

|                                |          |
|--------------------------------|----------|
| Performance level (PL)         | PL e     |
| Category                       | Cat. 4   |
| Mission Time (T <sub>M</sub> ) | 20 a     |
| PFH <sub>d</sub>               | 3.54 E-9 |
| Type                           | 4        |

**Indicators/operating means**

|                       |   |
|-----------------------|---|
| 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<br>LED yellow: types of muting operation |
| Muting indicator      | Indicator lamp  |
| Pre-fault indicator   | LED red next to receiver flashes  |
| Control elements      | 10 DIP switch in receiver terminal compartment  |

**Electrical specifications**

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

**Input**

|                    |   |
|--------------------|---|
| Activation current | approx. 10 mA   |
| Activation time    | 0.03 ... 1 s  |
| Test input         | Reset-input for system test                           |
| Function input     | Relay monitor, start release, muting sensors (max. 4) |

**Output**

|                             |   |
|-----------------------------|---|
| Pre-fault indication output | 1 PNP, +U <sub>B</sub> -2 V, max. 300 mA  |
| Safety output               | 2 separated fail safe semiconductor outputs   |
| Signal output               | 1 PNP each, max. 300 mA for startup readiness, OSSD on, OSSD off, muting lamp, signals in parallel in the lamp socket |
| Switching voltage           | Operating voltage -2 V  |
| Switching current           | max. 0.5 A  |
| Response time               | 20 ms   |

**Conformity**

|                   |                          |
|-------------------|--------------------------|
| Functional safety | ISO 13849-1              |
| Product standard  | EN 61496-1 ; IEC 61496-2 |

**Ambient conditions**

|                     |                               |
|---------------------|-------------------------------|
| Ambient temperature | 0 ... 50 °C (32 ... 122 °F)   |
| Storage temperature | -20 ... 70 °C (-4 ... 158 °F) |
| Relative humidity   | max. 95 % , not condensing    |

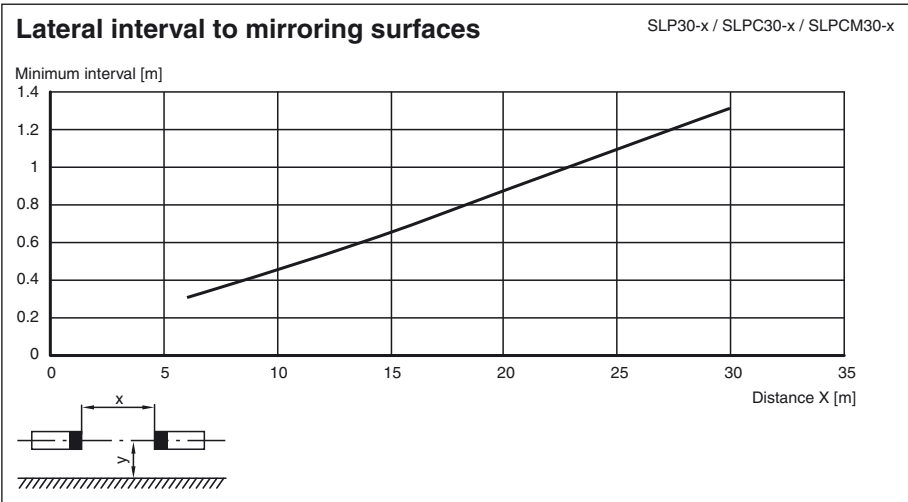
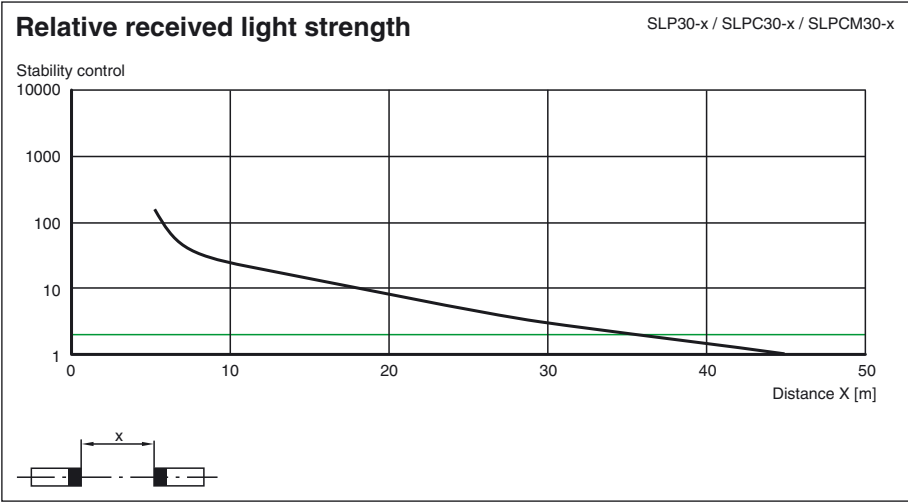
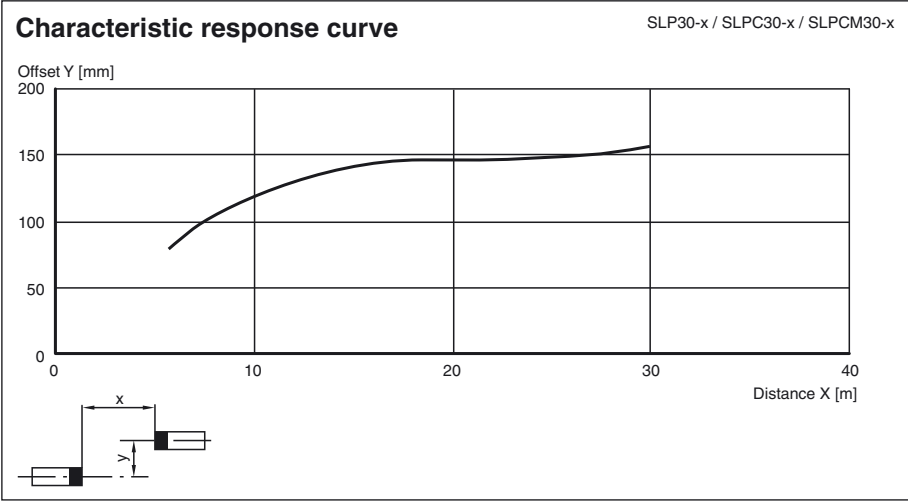
**Mechanical specifications**

|                      |   |
|----------------------|---|
| Degree of protection | IP65  |
| Connection           | M16 cable gland ,<br>terminal compartment with cage terminals,<br>M12 connector for transmitters, muting lamp, etc., muting sensors,<br>lamp socket for muting lamp, etc. |
| 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 3400 g  |

**Approvals and certificates**

|               |  |
|---------------|--|
| CE conformity | CE   |
| CCC approval  | CCC approval / marking not required for products rated ≤36 V |
| Approvals     | TÜV  |

Curves/Diagrams




Release date: 2018-01-03 08:59 Date of issue: 2018-01-03 11:48:88\_eng.xml

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

## Additional information

### Socket assignment on the front side of the device



Indicator lamp control 

| Socket | Function              |
|--------|-----------------------|
| 1      | OSSD on               |
| 2      | OSSD off              |
| 3      | 0 V                   |
| 4      | Readiness for startup |
| 5      | Muting (monitored)    |

### T1 - T4 transmitter control

| Socket | Function              |
|--------|-----------------------|
| 1      | Transmitter channel 1 |
| 2      | Transmitter channel 2 |
| 3      | 0 V                   |
| 4      | Transmitter channel 3 |

### Muting sensor inputs MS1 - MS4

| Socket | Function      |
|--------|---------------|
| 1      | + 24 V        |
| 3      | 0 V           |
| 4      | Sensor signal |

## System accessories

- Mounting set MS SLP
- Profile alignment aid PA SLP/SLC
- Laser alignment aid BA SLP
- Ground pillar UC SLP/SLC
- Housing for pillar  
Enclosure UC SLP/SLC
- Collision protector  
Damping UC SLP/SLC
- Redirection mirror SLP-3-M