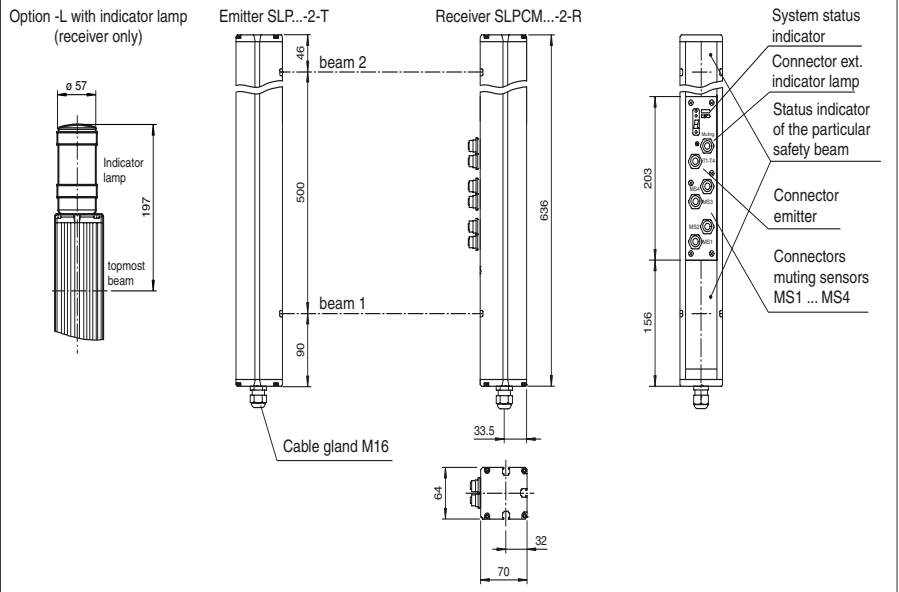




**Dimensions**



**Model Number**

**SLPCM65-2**

Safety light grid with integrated control unit  
with 2 separate fail-safe semiconductor outputs

**Features**

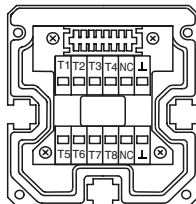
- Detection range up to 65 m
- 2-Radial design
- Beam spacing 500 mm
- Self-monitoring (type 4 according to IEC/EN 61496-1)
- Red transmission light
- Usable with or without start/restart disable
- Sequential and parallel muting in various operating modes
- Emergency muting for the correction of the 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-2**  
Mounting aid Safety

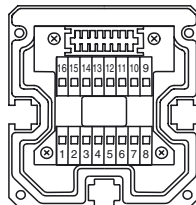
**Electrical connection**

Emitter SLP



- T1 - Emitter channel 1
- T2 - Emitter channel 2
- 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 monitor                   |
| 8 - OSSD 2                             | 5 - Start release                   |
|  | 6 - Reset                           |
|  | 7 - PNP-output, Soiled optics       |
|  | 8 - PNP-output, Muting lamp         |
|  | 9 - PNP-output, Startup readiness   |
|  | 10 - PNP-output, Indicator OSSD OFF |
|  | 11 - PNP-output, Indicator OSSD ON  |

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**Technical data****General specifications**

|                                       |  |
|---------------------------------------|--|
| Effective detection range             | 12 ... 65 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: 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, muting operating modes     |
| 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 <sub>M</sub> ) | 20 a     |
| PFH <sub>d</sub>               | 3.54 E-9 |

**Indicators/operating means**

|                      |   |
|----------------------|---|
| Diagnosis display    | 7-segment display   |
| Function display     | 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 |
| Pre-fault indication | LED red next to receiver flashes  |
| Operating elements   | 10 DIP switch in receiver terminal compartment  |

**Electrical specifications**

|                        |                |   |
|------------------------|----------------|---|
| Operating voltage      | U <sub>B</sub> | 24 V DC -15 % / +25 % , electrically isolated |
| No-load supply current | I <sub>0</sub> | max. 250 mA                                   |
| Protection class       |                | III   |

**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**

|                                    |   |
|------------------------------------|---|
| Output of the pre-fault indication | 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 start readiness, OSSD on, OSSD off, muting lamp |
| Switching voltage                  | Operating voltage -2 V  |
| Switching current                  | max. 0.5 A  |
| Response time                      | 20 ms   |

**Ambient conditions**

|                     |                               |
|---------------------|-------------------------------|
| Ambient temperature | 0 ... 50 °C (273 ... 323 K)   |
| Storage temperature | -20 ... 70 °C (253 ... 343 K) |
| Relative humidity   | max. 95 %, not condensing     |

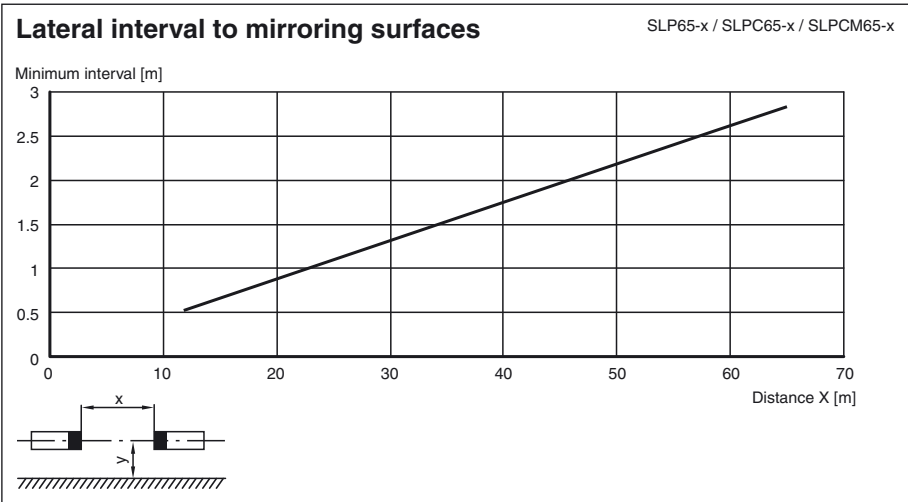
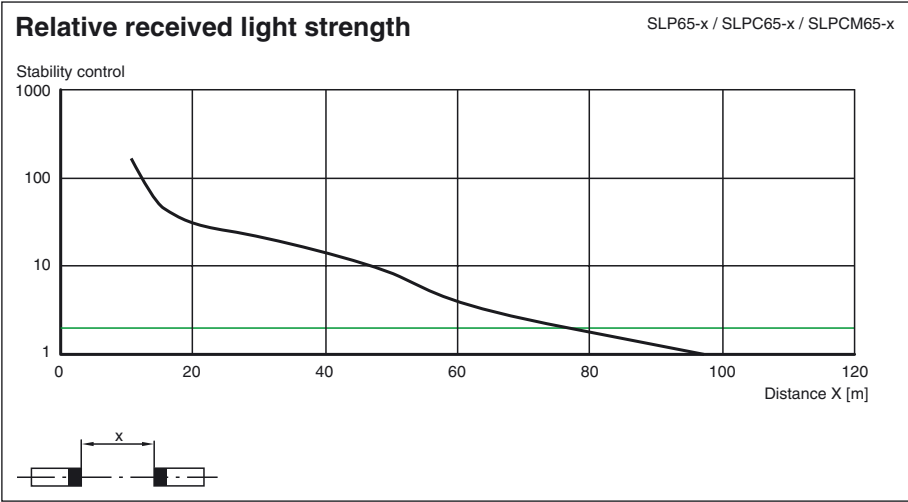
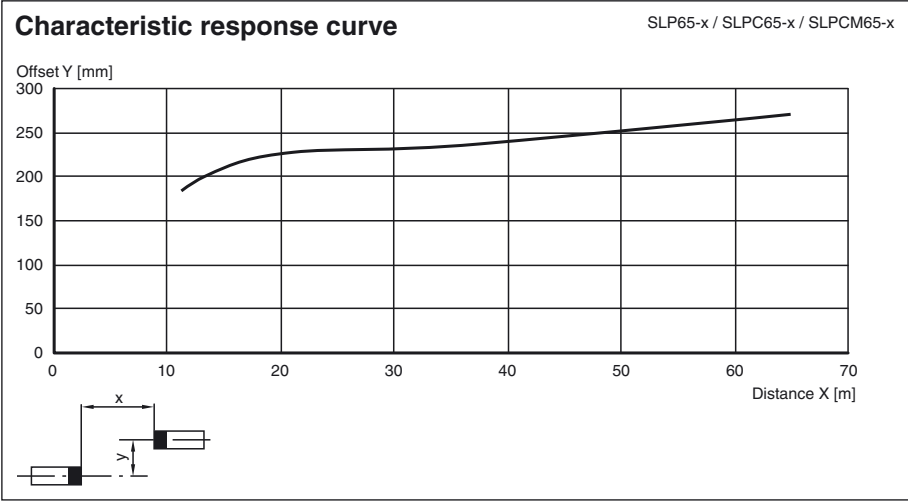
**Mechanical specifications**

|                    |   |
|--------------------|---|
| Protection degree  | IP65  |
| Connection         | Cable screwed connection M16 ,<br>terminal compartment with cage-terminals,<br>M12-connector for emitter, muting lamp as well as other muting sensors |
| Connection options | Further electrical connection options on request:<br>Connector DIN 43 651 Hirschmann, emitter: 6-pin+PE, receiver: 11-pin+PE                          |
| Material           |   |
| Housing            | aluminium extruded structural profile, RAL 1021 (yellow) coated   |
| Optical face       | Plastic pane  |
| Mass               | Per 2300 g  |

**General information**

|                   |             |
|-------------------|-------------|
| System components |             |
| Emitter           | SLP65-2-T   |
| Receiver          | SLPCM65-2-R |

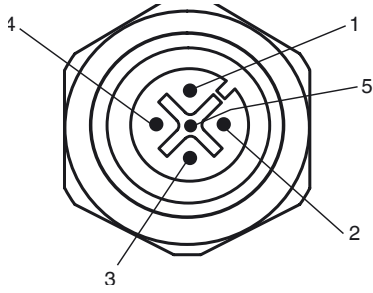
Curves/Diagrams




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**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                   |

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-2-M

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