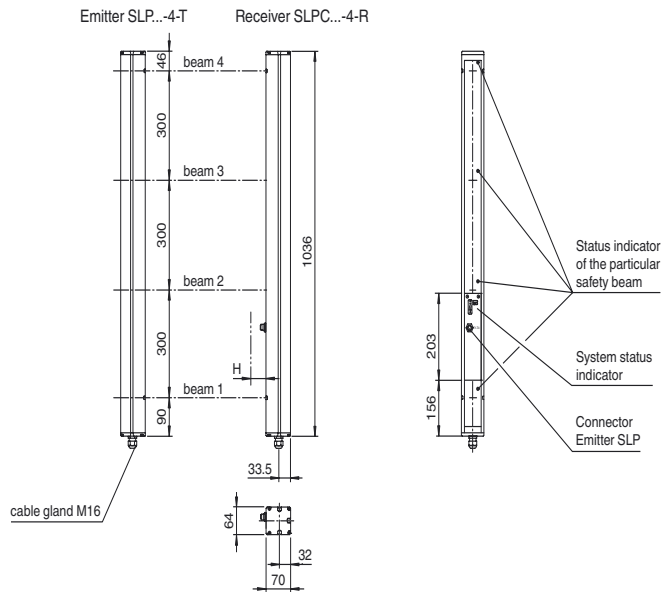


**Dimensions**



**Model Number**

**SLPC65-4**

with 2 separate fail-safe semiconductor outputs

**Features**

- Sensing range up to 65 m
- 4-radial design
- Beam spacing 300 mm
- Self-monitoring (type 4 according to IEC/EN 61496-1)
- Red transmission light
- Usable with or without start/restart disable
- Integrated relay monitor
- 7-segment diagnostic display
- Integrated function display
- Pre-fault indication
- OSSD outputs as semiconductor or relay outputs

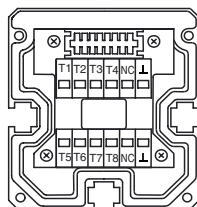
**Accessories**

**PG SLP-4**

Protective glass panes for SLP series

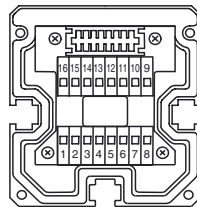
**Electrical connection**

Emitter SLP



- T1 - Emitter channel 1
- T2 - Emitter channel 2
- T3 - Emitter channel 3
- T4 - Emitter channel 4
- 0V

Receiver SLPC



| Receiver SLPC (semi-conductor outputs) | Receiver SLPC/S1 (relay output)     |
|--|-------------------------------------|
| 4 - n.c.                               | 1 - Functional earth                |
| 5 - -                                  | 2 - 0V                              |
| 6 - +                                  | 3 - 24V                             |
| 7 - OSSD 1                             | 4 - Relay output                    |
| 8 - OSSD 2                             | 5 - Relay output                    |
|  | 6 - Relay output                    |
|  | 7 - Relay output                    |
|  | 8 - Relay output                    |
|  | 9 - Input, Relay monitor            |
|  | 10 - Input, Start release           |
|  | 11 - Input, Reset                   |
|  | 12 - PNP-Output, Soiled optics      |
|  | 13 - n.c.                           |
|  | 14 - PNP-Output, Startup readiness  |
|  | 15 - PNP-Output, Indicator OSSD OFF |
|  | 16 - PNP-Output, Indicator OSSD ON  |

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

|                                       |  |
|---------------------------------------|--|
| Effective detection range             | 12 ... 65 m  |
| Light source                          | LED  |
| Light type                            | modulated visible red light                                      |
| Approvals                             | TÜV  |
| 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                          | 300 mm   |
| Number of beams                       | 4  |
| Operating mode                        | Start/restart disable, relay monitor,                            |
| 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 |
| Type                           | 4        |

**Indicators/operating means**

|                      |  |
|----------------------|--|
| Diagnostics 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 |
| Pre-fault indication | LED red next to receiver flashes   |
| Controls             | 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   |

**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 |

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

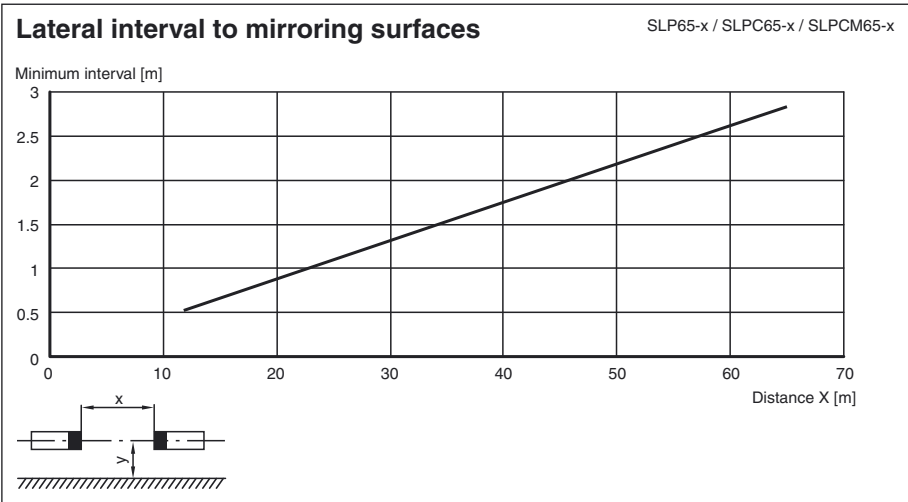
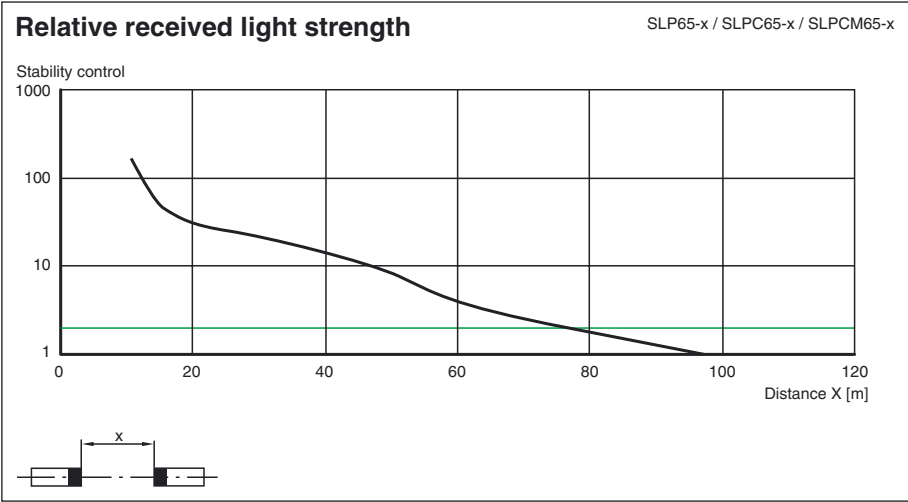
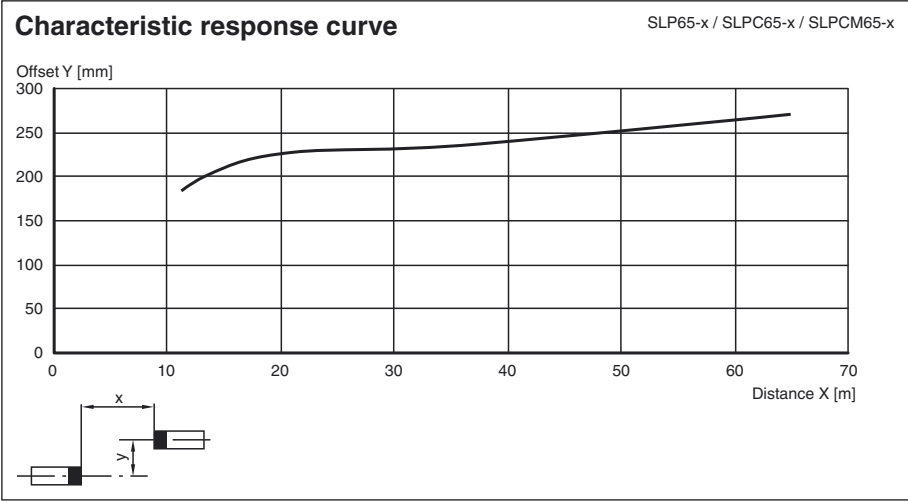
**Mechanical specifications**

|                    |  |
|--------------------|--|
| Protection degree  | IP65   |
| Connection         | M16 cable gland ,<br>terminal compartment with cage-terminals, M12-connector for emitter                                     |
| 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 3700 g   |

**General information**

|                   |            |
|-------------------|------------|
| System components |            |
| Emitter           | SLP65-4-T  |
| Receiver          | SLPC65-4-R |

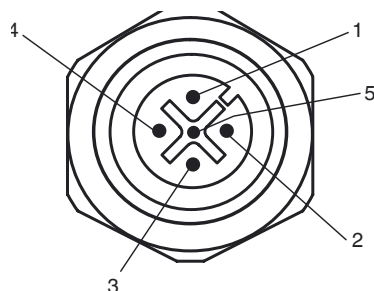
Curves/Diagrams



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## Additional information

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



T1 - T4 transmitter control

| Socket | Function              |
|--------|-----------------------|
| 1      | Transmitter channel 1 |
| 2      | Transmitter channel 2 |
| 3      | 0 V                   |
| 4      | Transmitter channel 3 |
| 5      | Transmitter channel 4 |

## 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 for multi-side protection of hazardous areas  
SLP-4-M