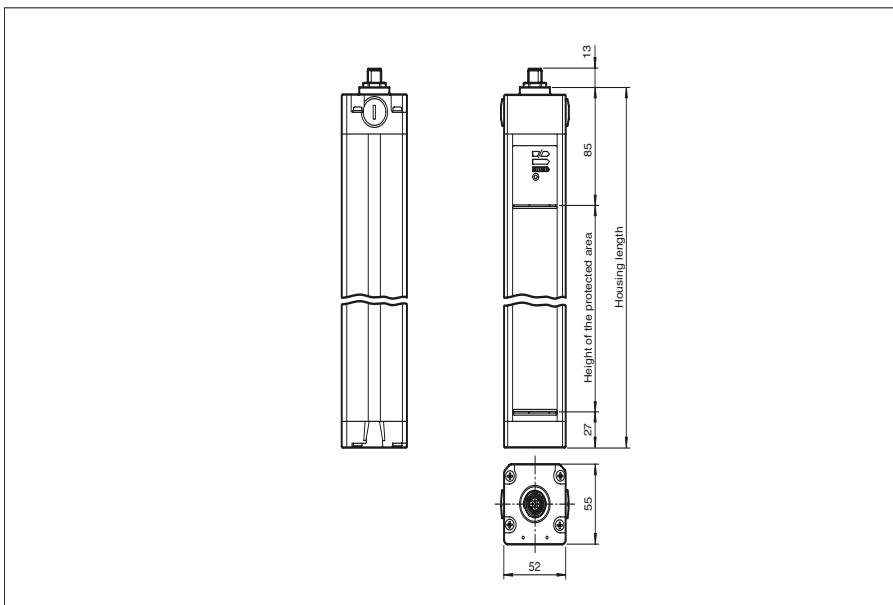




**Dimensions**



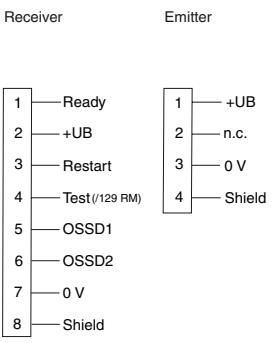
**Model Number**

**SLC-4/129/151**  
with 2 separate fail-safe semiconductor outputs

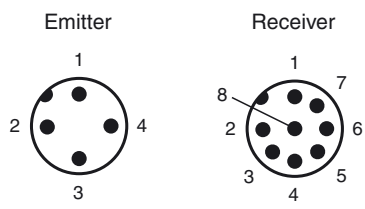
**Features**

- Sensing range up to 20 m
- 2, 3, and 4-beam design
- Beam distance 300, 400 and 500 mm
- Self-monitoring (type 4 according to IEC/EN 61496-1)
- Protection degree IP67
- 7-segment diagnostic display
- Pre-fault indication
- Connection via appliance socket M12 x b1
- Safety outputs OSSD in potential-separated semiconductor version
- Start/Restart disable preset by Option /129

**Electrical connection**



**Pinout**



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

|                                       |   |
|---------------------------------------|---|
| Effective detection range             | 0.2 ... 20 m  |
| Light source                          | IREDD   |
| Light type                            | modulated infrared light                              |
| Approvals                             | TÜV, cULus  |
| Tests                                 | IEC/EN 61496  |
| Safety type according to IEC/EN 61496 | 4   |
| Marking                               | CE  |
| Target size                           | 50 mm   |
| Beam spacing                          | 300 mm  |
| Number of beams                       | 4   |
| Operating mode                        | can be selected with or without start/restart disable |
| 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>               | 5.8 E-9 |
| Type                           | 4       |

**Indicators/operating means**

|                      |  |
|----------------------|--|
| Operating display    | 7-segment display in emitter   |
| Diagnostics display  | 7-segment display in receiver  |
| Function display     | in receiver:<br>LED red: OSSD off<br>LED green: OSSD on<br>LED yellow: Protected area free, system start-ready |
| Pre-fault indication | LED orange   |
| Controls             | switch for start/restart disable, transmission coding  |

**Electrical specifications**

|                        |                |                                   |
|------------------------|----------------|-----------------------------------|
| Operating voltage      | U <sub>B</sub> | 24 V DC (-30 %/+25 %)             |
| No-load supply current | I <sub>0</sub> | Emitter: 100 mA , receiver 150 mA |
| Protection class       |                | III                               |

**Input**

|                    |   |
|--------------------|---|
| Activation current | approx. 10 mA                                     |
| Activation time    | 0.03 ... 1 s                                      |
| Test input         | Reset-input for system test (not for option /129) |
| Function input     | Start release                                     |

**Output**

|                   |   |
|-------------------|---|
| Safety output     | 2 separated fail safe semiconductor outputs |
| Signal output     | 1 PNP, max. 100 mA for start readiness      |
| Switching voltage | Operating voltage -2 V                      |
| Switching current | max. 0.5 A                                  |
| Response time     | 10 ms                                       |

**Ambient conditions**

|                     |                                |
|---------------------|--------------------------------|
| Ambient temperature | 0 ... 55 °C (32 ... 131 °F)    |
| Storage temperature | -25 ... 70 °C (-13 ... 158 °F) |
| Relative humidity   | max. 95 %, not condensing      |

**Mechanical specifications**

|                   |  |
|-------------------|--|
| Protection degree | IP67   |
| Connection        | Emitter: M12 connector, 4-pin Receiver: M12 connector, 8-pin |
| Material          |  |
| Housing           | extruded aluminum profile, RAL 1021 (yellow) coated          |
| Optical face      | Plastic pane   |
| Mass              | Per 3450 g   |

**General information**

|                   |  |
|-------------------|--|
| System components |  |
| Emitter           | SLC-4-T / 92                                       |
| Receiver          | SLC-4-R / 129 / 151 Startup/restart disable preset |

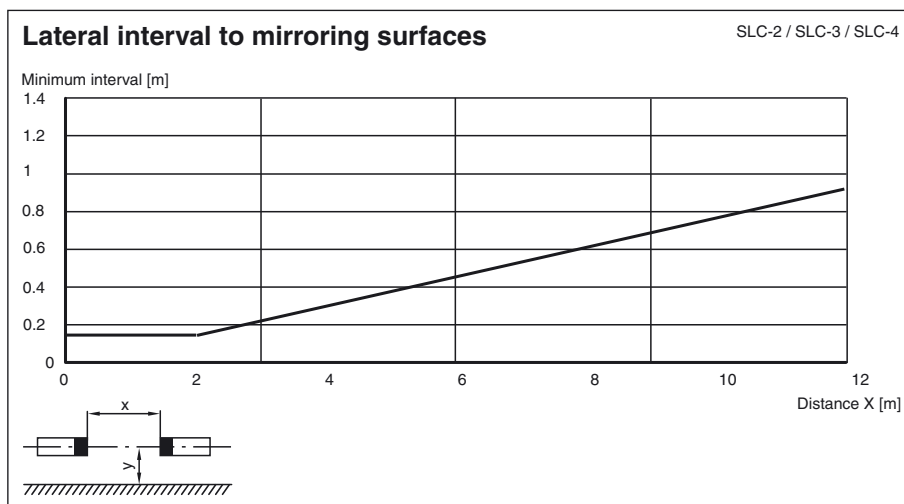
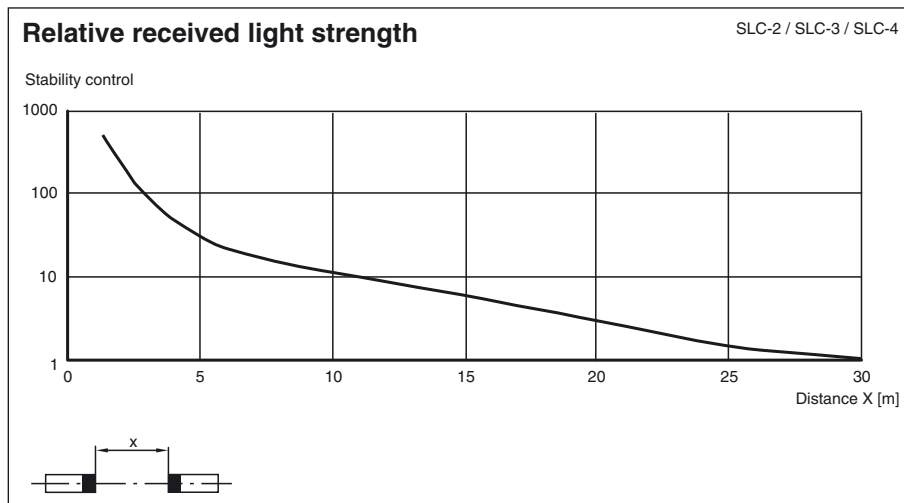
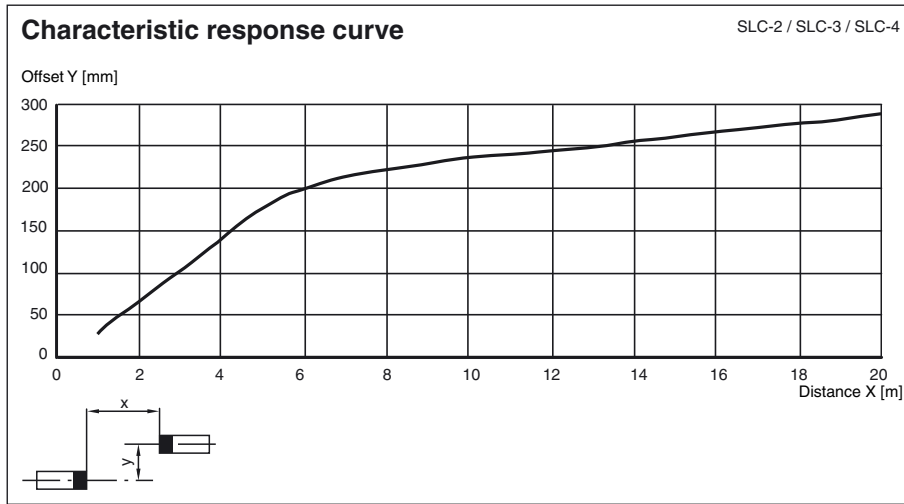
**Compliance with standards and directives**

|                                |   |
|--------------------------------|---|
| Directive conformity           |   |
| Machinery Directive 2006/42/EC | EN ISO 13849-1:2008 EN 61496-1:2004/A1:2008 |
| EMC Directive 2004/108/EC      | EN 61000-6-4:2007 + A1:2011                 |
| Standard conformity            |   |
| Standards                      | IEC 61496-2:2006 EN 50178:1997              |

**Approvals and certificates**

|               |  |
|---------------|--|
| CE conformity | CE   |
| UL approval   | cULus Listed   |
| CCC approval  | Products with a maximum operating voltage of ≤36 V do not bear a CCC marking because they do not require approval. |
| TÜV approval  | TÜV  |

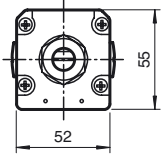
Curves/Diagrams



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## Additional information

### Profile dimensions, front view



## System accessories

- Mounting set SLC
- Protective glass pieces for SLC (to protect the optically functional surface)
- Lateral screwed connection SLC
- Mirror 2, 3 or 4-beam for SLC (for multi-side securing of hazardous areas)
- Laser alignment aid BA SLC
- Profile alignment aid PA SLP/SLC
- Ground pillar UC SLP/SLC
- Housing for ground pillar Enclosure UC SLP/SLC
- Collision protector Damping UC SLP/SLC