







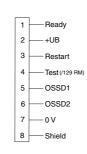
# **Electrical connection**

**Dimensions** 

Emitter

Receiver





## **Model Number**

### SLC14-1500/129/130/151

with 2 separate fail-safe semiconductor outputs

### **Features**

- Sensing range up to 5 m
- Resolution 14 mm (finger protection)
- Self-monitoring (type 4 according to IEC/EN 61496-1)
- Master/Slave detection, Plug and Play
- · Very short response time
- Protection degree IP67
- Integrated function display
- Pre-fault indication
- Connection via appliance socket M12 x b1
- Safety outputs OSSD in potential-separated semiconductor version
- Protective field height up to 1800 mm
- Start/Restart disable preset by Option /129

## **Accessories**

### **PG SLC-1500**

Protective glass panes for SLC series

#### BA SLC

laser alignment aid for safety light cutrtains series SLC

## **Pinout**





Tec		

General s	pecifications
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Effective detection range 0.2 ... 5 m IRFD Light source

modulated infrared light Light type

Approvals TÜV, cULus Tests IEC/EN 61496

Safety type according to IEC/EN 61496 CE Marking

Width of protected area 0.2 ... 5 m Protection field height 1500 mm Number of beams

can be selected with or without start/restart disable Operating mode

Optical resolution 14 mm Angle of divergence < 5 °

Functional safety related parameters

Safety Integrity Level (SIL) SIL 3 Performance level (PL) PL e Cat. 4 Category Mission Time (T<sub>M</sub>) 20 a 2 28 F-8  $PFH_d$ Type

Indicators/operating means

Operating display 7-segment display in emitter Diagnostics display 7-segment display in receiver

Function display in receiver: LED red: OSSD off

LED green: OSSD on LED yellow: Protected area free, system start-ready

Pre-fault indication

Controls switch for start/restart disable, transmission coding

**Electrical specifications** 

24 V DC (-30 %/+25 %) Operating voltage  $\mathsf{U}_\mathsf{B}$ 

Emitter: ≤ 100 mA receiver: ≤ 150 mA No-load supply current I<sub>0</sub>

Protection class

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 31 ms

**Ambient conditions** 

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

Mechanical specifications

Housing length L 1610 mm Protection degree

Connection Emitter: M12 connector, 4-pin Receiver: M12 connector, 8-pin

Material

extruded aluminum profile, RAL 1021 (yellow) coated Housing

Optical face Plastic pane Per 4800 g Mass

General information

System components

Emitter SLC 14 - 1500 -T/130 / 92 Receiver SLC14 - 1500 -R/129 / 130 / 151

Compliance with standards and directi-

ves

Directive conformity

Machinery Directive 2006/42/EC EN ISO 13849-1:2008 EN 61496-1:2004/A1:2008

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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

Products with a maximum operating voltage of ≤36 V do not bear a CCC marking because they do not require approval. CCC approval

TÜV approval

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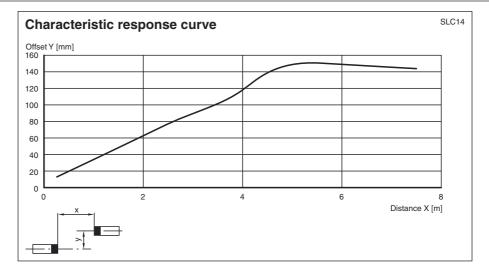
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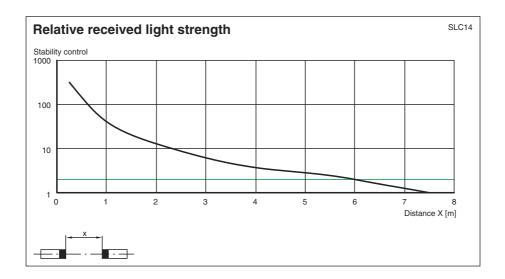
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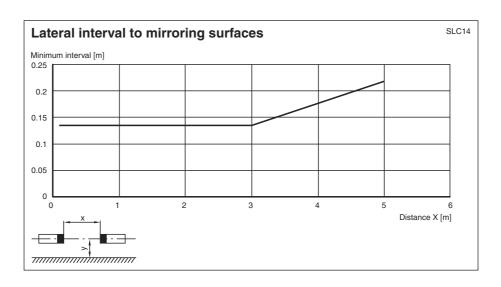
Date of issue:

11:46

2012-08-01







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## **Master-Slave operation**

SLC..-... (semiconductor) Master:

or SLC ..-../31 (relay)

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SLC..-...-S Slave:



The use of slaves allows both the protection fields to be extended and protection fields to be created that do not all exist at a single level. When deciding which slaves to connect, remember that the total maximum of 96 beams must not be exceeded. Up to 192 beams are possible if the /130 option is selected.

Slaves exist for the transmitter and the receiver. These simply need to be connected to the master light curtain. Up to two slaves can be connected to both the transmitter and receiving units. Only one slave can be connected if the /130 option is selected.

#### Installation:

- The end cap (no cable gland) on the light curtain is unscrewed and removed. 1
- 2 The plug-in jumper on the connectors of the now visible PCB is removed.
- The slave is designed in such a way that the cap and PCB on the connecting cable plug directly onto the open end of the light curtain.
- Once the end cap has been screwed on, the system is complete.

## System accessories

- Mounting set SLC
- Test rods SLC14/SLC30/SLC60
- Protection glass for SLC (to protect the optical surface)
- Side cable gland SLC
- Profile alignment tool
- Beam alignment tool SLC
- Mirror for SLC (to protect danger areas on more than one side)
- Stands UC SLP/SLC
- Enclosure for stands Enclosure UC SLP/SLC
- Start protection Damping UC SLP/SLC

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