

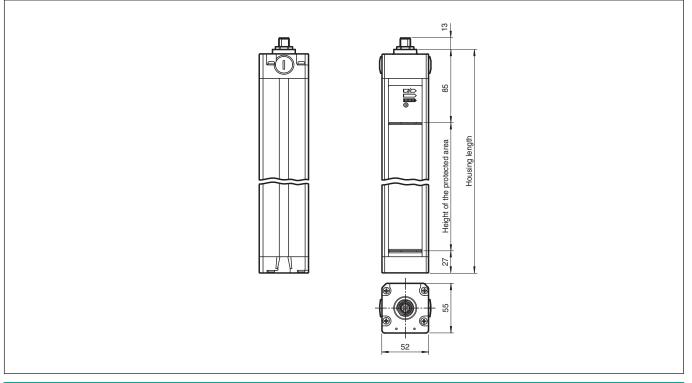
# Safety light curtain



- SLC30-600/129
- Sensing range up to 15 m
- Resolution 30 mm (hand protection)
- Self-monitoring (type 4 according to IEC/EN 61496-1)
- Master/Slave detection, Plug and Play
- Degree of protection IP67
- Integrated function display
- Pre-fault indication
- Safety outputs OSSD in potential-separated semiconductor version
- Protective field height up to 1800 mm
- Start/Restart disable preset by Option /129
- Integrated relay monitor

# 

## Dimensions



## **Technical Data**

System components	
Emitter	SLC30-600-T
Receiver	SLC30-600-R/129
General specifications	
Effective detection range	0.2 15 m
Light source	IRED
Light type	modulated infrared light
LED risk group labelling	exempt group

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

Pepperl+Fuchs Group www.pepperl-fuchs.com USA: +1 330 486 0001 fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 1111 fa-info@de.pepperl-fuchs.com Singapore: +65 6779 9091 fa-info@sg.pepperl-fuchs.com



## **Technical Data**

Technical Data		
Tests		IEC/EN 61496
Safety type according to IEC/EN 61496		4
Width of protected area		0.2 15 m
Protection field height		600 mm
Number of beams		32
Operating mode		Startup/restart disable preset with Relay monitor (preset)
Optical resolution		30 mm
Angle of divergence		< 5 °
Functional safety related parameters		
Safety Integrity Level (SIL)		SIL 3
Performance level (PL)		PLe
Category		Cat. 4
Mission Time (T <sub>M</sub> )		20 a
PFH <sub>d</sub>		1.5 E-8
Туре		4
Indicators/operating means		
Operation indicator		7-segment display in emitter
Diagnostics indicator		7-segment display in receiver
Function indicator		in receiver: LED red: OSSD off LED green: OSSD on LED yellow: Protected area free, system start-ready
Pre-fault indicator		LED orange
Control elements		Transmission coding
Electrical specifications		
Operating voltage	$U_B$	24 V DC (-30 %/+25 %)
No-load supply current	I <sub>0</sub>	Emitter: ≤ 100 mA receiver: ≤ 150 mA
Protection class		II
Input		
Activation current		approx. 10 mA
Activation time		0.03 1 s
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		14 ms
Conformity		100 100 10 1
Functional safety		ISO 13849-1
Product standard		EN 61496-1 ; IEC 61496-2
Approvals and certificates		
CE conformity		CE cULus Listed
UL approval		
CCC approval TÜV approval		CCC approval / marking not required for products rated ≤36 V TÜV
Ambient conditions		101
Ambient temperature		0 55 °C (32 131 °F)
•		-25 70 °C (-13 158 °F)
Storage temperature		
Relative humidity Mechanical specifications		max. 95 %, not condensing
Housing length L		710 mm
Degree of protection		IP67

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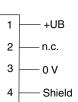
Release date: 2020-03-23 Date of issue: 2020-10-06 Filename: 132862\_eng.pdf

#### Safety light curtain

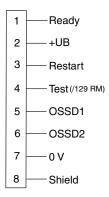
# Technical Data Connection Emitter: terminal compartment with screw terminals, lead cross-section max. 1.5 mm² Material mm² Housing extruded aluminum profile, RAL 1021 (yellow) coated Optical face Plastic pane Mass Per 2100 g

#### **Connection Assignment**

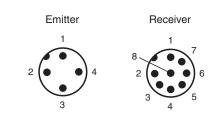
Emitter







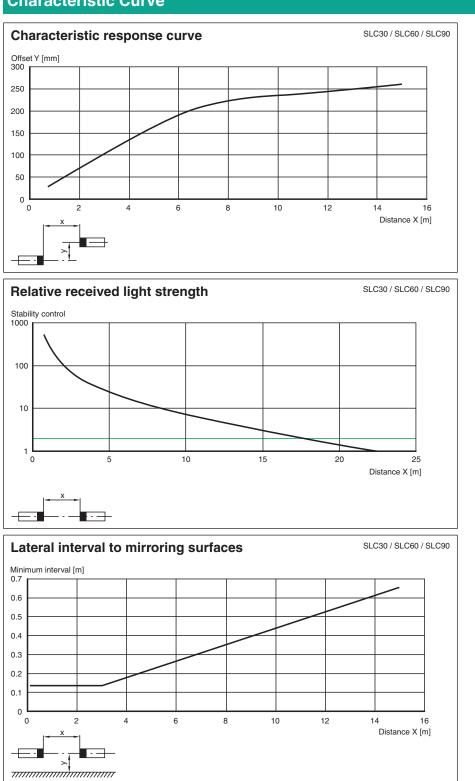
#### **Connection Assignment**



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#### **Characteristic Curve**



#### Matching system components

SB4-OR-4XP-B-4159	Safety control unit
SB4-OR-4XP	Safety control unit
SB4-OR-4XP-B	SB4 series safety control unit with 1 optional module slot for functional enhancement

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#### SLC30-600/129

#### Matching system components

SB4-OR-4XP-B-B	SB4 series safety control unit with optional module slots for functional enhancement
SB4-OR-4XP-B-B-B	SB4 series safety control unit with optional module slots for functional enhancement
SB4-OR-4XP-B-B-B-B	SB4 series safety control unit with optional module slots for functional enhancement
SB4-OR-4XP-B-B-B-B-B- B	SB4 series safety control unit with optional module slots for functional enhancement
SB4-OR-4XP-B-4158	Safety control unit
SB4-OR-4XP-3819	Safety control unit
SB4-OR-4XP-4M	Safety control unit
SB4-OR-4XP-4MD	Safety control unit
SB4-OR-4XP-4M-4136	Safety control unit of series SB4
SB4-OR-4XP-4X	Safety control unit
SB4-OR-4XP-4X-3819	Safety control unit
SB4-OR-4XP-4136	Safety control unit of series SB4

#### **Accessories**

PG SLC-600	Protective glass panes for SLC series

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 Pepperl+Fuchs Group
 USA: +1 330 486 0001
 Gr

 www.pepperl-fuchs.com
 fa-info@us.pepperl-fuchs.com
 fa-info@us.pepperl-fuchs.com

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#### Notes

#### Master slave mode

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

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

Slave: SLC..-...-S

Using slaves makes it possible to lengthen protective fields or to form protective fields that lie in more than just one level. When you select slaves that can be connected, you should take into consideration that the maximum number of 96 light rays must not be exceeded.

There are slaves for transmitters and receivers. These may simply be connected to the master light curtain. As many as 2 slaves may be connected respectively to the transmitter and receiver unit.

Installation:

- 1. The end cap should be screwed off for the light curtain (without cable gland).
- 2. The plug-in jumper on the connectors of the printed circuit board, which is now visible, should be removed.
- 3. The slave is designed so that the cap located on the cable connector can be plugged directly onto the open end of the light curtain with the printed circuit board.
- 4. After you have screwed on the connection cap, the system is complete.

#### System accessories

- Mounting set SLC
- Test rods SLC14/SLC30/SLC60
- Protective glass pieces for SLC (to protect the optically functional surface)
- Lateral screwed connection SLC
- Profile alignment aid
- Laser alignment aid SLC
- · Mirror for SLC (for securing hazardous areas on multiple sides)
- Ground pillar UC SLP/SLC
- Housing for pillar
- Enclosure UC SLP/SLC
- Collision protector Damping UC SLP/SLC

