Safety light curtain

SLC30-300/151





Model Number

SLC30-300/151

with 2 separate fail-safe semiconductor outputs

Features

- ٠ Sensing range up to 15 m
- Resolution 30 mm (hand protection) ٠
- Self-monitoring (type 4 according to IEC/EN 61496-1)
- Master/Slave detection, Plug and • Play
- Start/Restart disable ٠
- Protection degree IP67 •
- Integrated function display •
- Pre-fault indication .
- Optional with relay monitor (Option • 129)
- Connection via appliance socket M12 x b1
- Safety outputs OSSD in potential-se-٠ parated semiconductor version
- Protective field height up to 1800 mm •

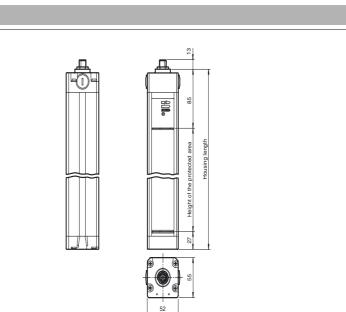
Accessories

PG SLC-300

Protective glass panes for SLC series

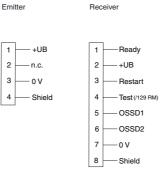
BA SLC

laser alignment aid for safety light cutrtains series SLC



Electrical connection

Dimensions



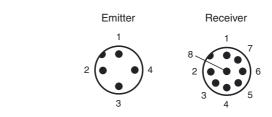
Pinout

1

2

з

4





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www.pepperl-fuchs.com

USA: +1 330 486 0001 fa-info@us.pepperl-fuchs.com Germany: +49 621 776-4411 fa-info@pepperl-fuchs.com

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SLC30-300/151

Technical data	
General specifications	
Effective detection range	0.2 15 m
Light source	IRED
Light type	modulated infrared light
Approvals	TÜV, cULus
Tests	IEC/EN 61496
Safety type according to IEC/EN 6149	6 4
Marking	CE
Width of protected area	0.2 15 m
Protection field height	300 mm
Number of beams	16
Operating mode	can be selected with or without start/restart disable
Optical resolution	30 mm
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 _M)	20 a
PFHd	1.35 E-8
Туре	4
Indicators/operating means	
Operating display	7-segment display in emitter
Diagnostics display	7-segment display in receiver
Function display	in receiver:
T unction display	LED red: OSSD off
	LED green: OSSD on
	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 _B	24 V DC (-30 %/+25 %)
No-load supply current I ₀	Emitter: ≤ 100 mA receiver: ≤ 150 mA
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	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	
Housing length L	410 mm
Protection degree	IP67
Connection	Emitter: M12 connector, 4-pin Receiver: M12 connector, 8-pin
Material	
Housing	extruded aluminum profile, RAL 1021 (yellow) coated
0	
Optical face	Plastic pane
Mass	Per 1200 g
General information	
System components	
Emitter	SLC30-300-T / 92
Receiver	SLC30-300-R / 151
Compliance with standards and dire	xti-
Directive conformity	
	EN ISO 13849-1:2008 EN 61496-1:2004/A1:2008
Directive conformity	
Directive conformity Machinery Directive 2006/42/EC	
Directive conformity Machinery Directive 2006/42/EC EMC Directive 2004/108/EC	
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Pepperl+Fuchs Group USA: +1 330 486 0001 www.pepperl-fuchs.com fa-info@us.pepperl-fuchs.com

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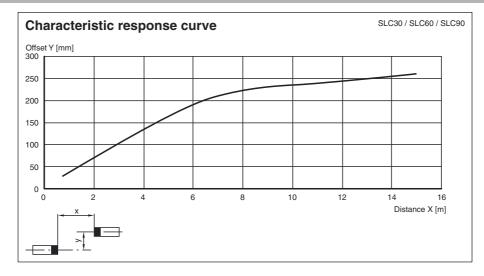
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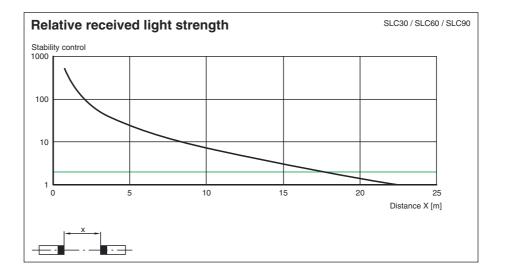
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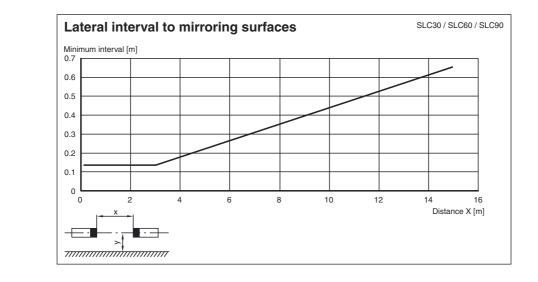
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Curves/Diagrams







Notes

Master slave mode



Master:	SLC (semiconductor)
	or
	SLC/31 (relay)
Slave:	SLCS

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

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