

Safety light curtain SLC30-1050/151



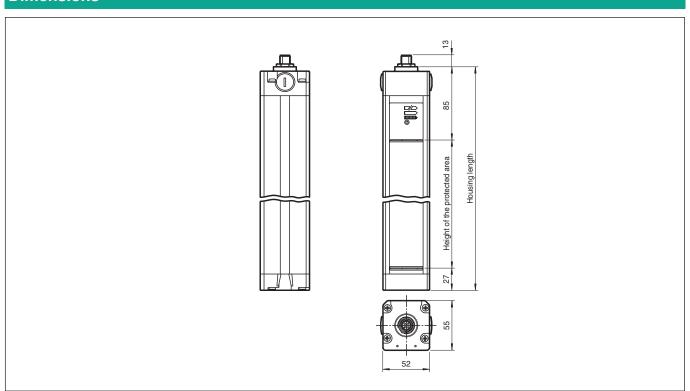
- Sensing range up to 15 m
- Resolution 30 mm (hand protection)
- Self-monitoring (type 4 according to IEC/EN 61496-1)
- Master/Slave detection, Plug and Play
- Start/Restart disable
- Degree of protection IP67
- Integrated function display
- Pre-fault indication
- Optional with relay monitor (Option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







Dimensions



Technical Data

Release date: 2020-03-23 Date of issue: 2020-10-06 Filename: 199751_eng.pdf

System components		
Emitter	SLC30-1050-T/92	
Receiver	SLC30-1050-R/151	
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"

Technical Data Tests IEC/EN 61496 Safety type according to IEC/EN 61496 4 Width of protected area 0.2 ... 15 m 1050 mm Protection field height Number of beams can be selected with or without start/restart disable Operating mode Optical resolution 30 mm Angle of divergence < 5 ° Functional safety related parameters SIL 3 Safety Integrity Level (SIL) Performance level (PL) PL e Category Cat. 4 20 a Mission Time (T_M) PFH_d 1.5 E-8 Type 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 switch for start/restart disable, transmission coding **Electrical specifications** Operating voltage U_B 24 V DC (-30 %/+25 %) Emitter: ≤ 100 mA receiver: ≤ 150 mA No-load supply current I_0 Protection class Ш Input Activation current approx. 10 mA Activation time 0.03 ... 1 s Reset-input for system test (not for option /129) Test input Function input Start release Output Safety output 2 separated fail safe semiconductor outputs 1 PNP, max. 100 mA for start readiness Signal output Switching voltage Operating voltage -2 V Switching current max. 0.5 A Response time 20 ms Conformity ISO 13849-1 Functional safety Product standard EN 61496-1; IEC 61496-2 Approvals and certificates CE conformity CE **UL** approval cULus Listed CCC approval CCC approval / marking not required for products rated ≤36 V TÜV approval ΤÜV **Ambient conditions** 0 ... 55 °C (32 ... 131 °F) Ambient temperature -25 ... 70 °C (-13 ... 158 °F) Storage temperature Relative humidity max. 95 %, not condensing Mechanical specifications Housing length L 1160 mm IP67 Degree of protection

Technical Data

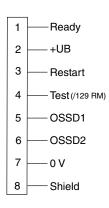
Connection	Emitter: M12 connector, 4-pin Receiver: M12 connector, 8-pin
Material	
Housing	extruded aluminum profile, RAL 1021 (yellow) coated
Optical face	Plastic pane
Mass	Per 3450 g

Connection Assignment

Emitter

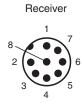


Receiver

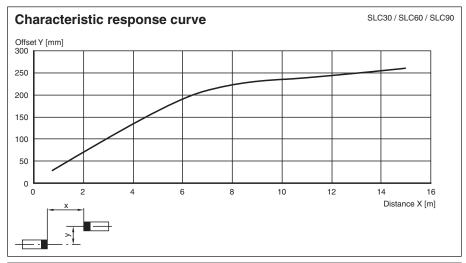


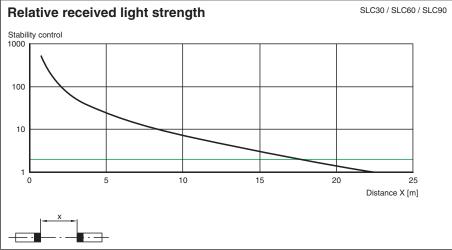
Connection Assignment

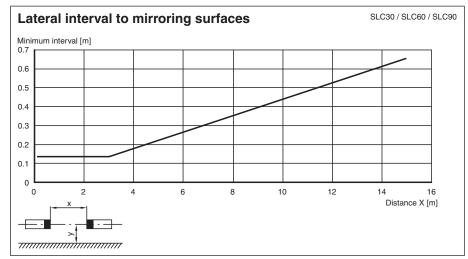




Characteristic Curve







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

Accessories

PG SLC-1050	Protective glass panes for SLC series

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