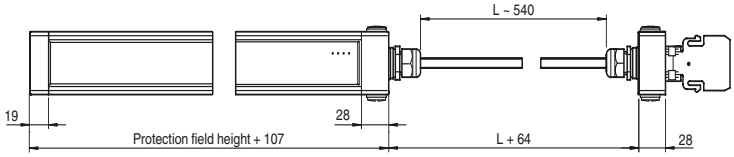
Dimensions

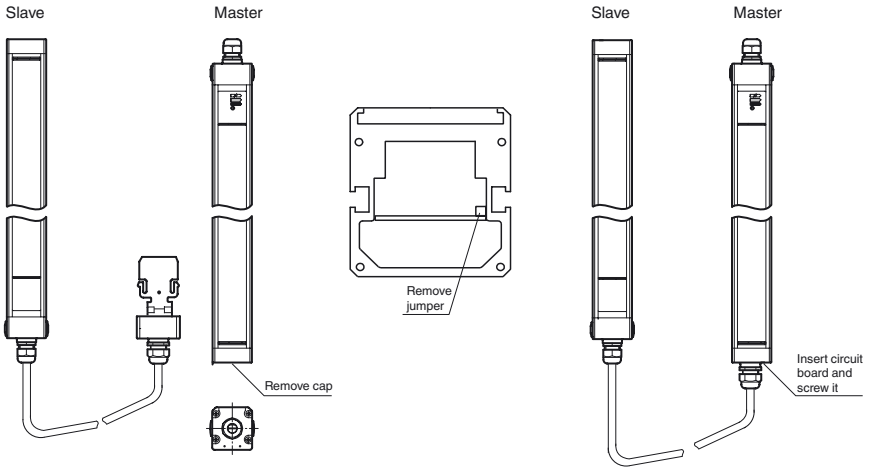


Model Number

SLC90-600-S

Slave module for master slave mode

Electrical connection



Features

- Sensing range up to 15 m
- Resolution 90 mm
- Protective field height up to 1800 mm
- 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
- Safety outputs OSSD in potential-separated semiconductor design or with monitored, compelled connection NC-contacts
- Optional with ATEX certificates for zone 2 and 22 and degree of protection IP66 (Option 133)

Accessories

PG SLC-600
Protective glass panes for SLC series

BA SLC
laser alignment aid for safety light cutrtains series SLC

Release date: 2017-12-11 10:17 Date of issue: 2017-12-11 113765_eng.xml

Technical data

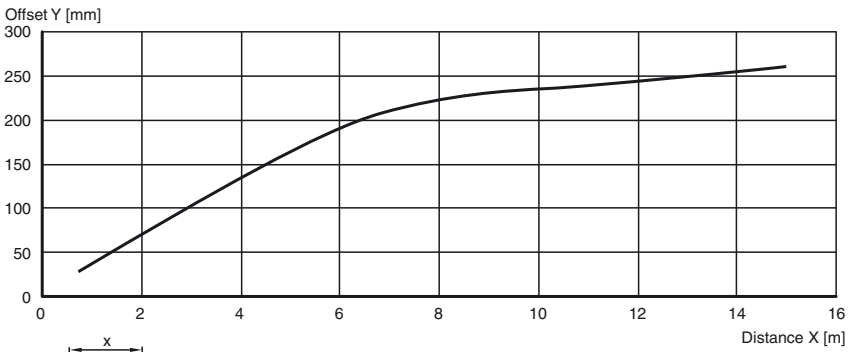
System components		
Emitter		SLC90-600-T-S
Receiver		SLC90-600-R-S
General specifications		
Effective detection range		0.2 ... 15 m
Light source		IRED
Light type		modulated infrared light
LED risk group labelling		exempt group
Tests		IEC/EN 61496
Safety type according to IEC/EN 61496		4
Width of protected area		0.2 ... 15 m
Protection field height		600 mm
Number of beams		8
Operating mode		in the master
Optical resolution		90 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
PFH_d		1.5 E-8
Type		4
Indicators/operating means		
Operation indicator		in the master
Diagnostics indicator		in the master
Function indicator		in the master
Pre-fault indicator		in the master
Control elements		in the master
Electrical specifications		
Operating voltage	U_B	from master
No-load supply current	I_0	from master
Protection class		III
Input		
Test input		in the master
Function input		in the master
Output		
Safety output		in the master
Signal output		in the master
Response time		depends on height of protective field
Conformity		
Functional safety		ISO 13849-1
Product standard		EN 61496-1 ; IEC 61496-2
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		710 mm
Degree of protection		IP67
Connection		M20 cable gland , terminal compartment with screw terminals, lead cross-section max. 1.5 mm^2
Material		
Housing		extruded aluminum profile, RAL 1021 (yellow) coated
Optical face		Plastic pane
Mass		Per 2100 g
Approvals and certificates		
CE conformity		CE
UL approval		cULus Listed
CCC approval		CCC approval / marking not required for products rated ≤36 V
TÜV approval		TÜV

Release date: 2017-12-11 10:17 Date of issue: 2017-12-11 113765_eng.xml

Curves/Diagrams

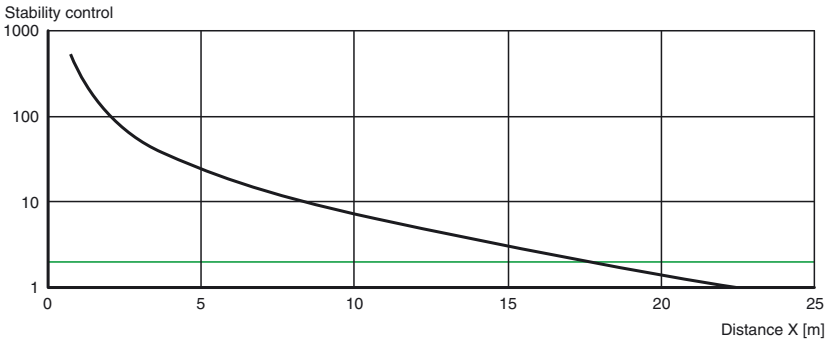
Characteristic response curve

SLC30 / SLC60 / SLC90



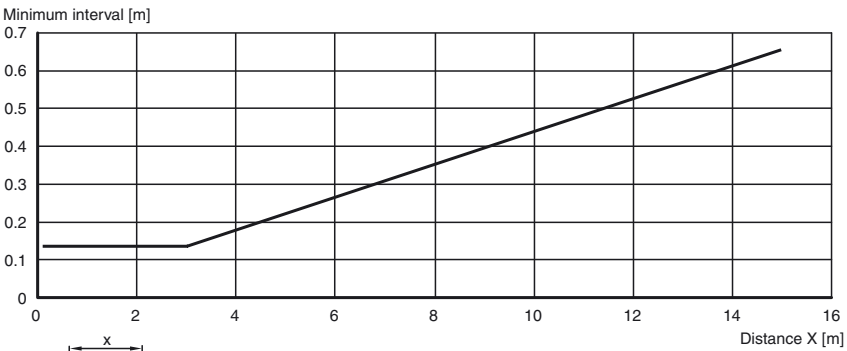
Relative received light strength

SLC30 / SLC60 / SLC90



Lateral interval to mirroring surfaces

SLC30 / SLC60 / SLC90



Notes

Response times of cascading units

If cascading units are set up, the response time of the entire SLC, consisting of a master and a slave, must be determined. The overall number of beams for master and slave can be determined from technical data sheets. Depending on the type of output, the resulting response time can be read from the table.

Release date: 2017-12-11 10:17 Date of issue: 2017-12-11 113765_eng.xml

Number of beams	Response time in milliseconds	
	Semiconductor output	Relay output
8	10	30
16	10	30
24	12	32
32	14	34
40	16	36
48	18	38
56	20	40
64	22	42
72	24	44
80	26	46
88	28	48
96	30	50

Example: Master: SLC14-300/31 32 beams
Slave: SLC60-90-S+ 24 beams
56 beams

56 beams, OSSD relay --> response time = 40 ms.

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

Release date: 2017-12-11 10:17 Date of issue: 2017-12-11 113765_eng.xml