Dimensions

Option -L with indicator lamp (receiver only)

ø 57

Indicator lamp

197

topmost beam

Emitter SLP...-2-T

46

beam 2

500

beam 1

90

Cable gland M16

Receiver SLPCM...-2-R

636

33.5

64

32

70

System status indicator

Connector ext. indicator lamp

Status indicator of the particular safety beam

Connector emitter

Connectors muting sensors MS1 ... MS4

203

156

Model Number

SLPCM30-2

with 2 separate fail-safe semiconductor outputs

Features

- Sensing range up to 30 m
- 2-radial design
- Beam spacing 500 mm
- Self-monitoring (type 4 according to IEC/EN 61496-1)
- Red transmission light
- Usable with or without start/restart disable
- Sequential and parallel muting in various operating modes
- Emergency muting for the correction of the material jam
- Integrated relay monitor
- 7-segment diagnostic display
- Integrated function display
- Pre-fault indication
- OSSD outputs as semiconductor or relay outputs
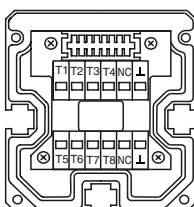
Accessories
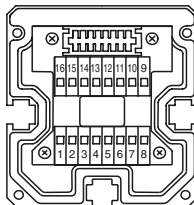
PG SLP-2
Protective glass panes for SLP series
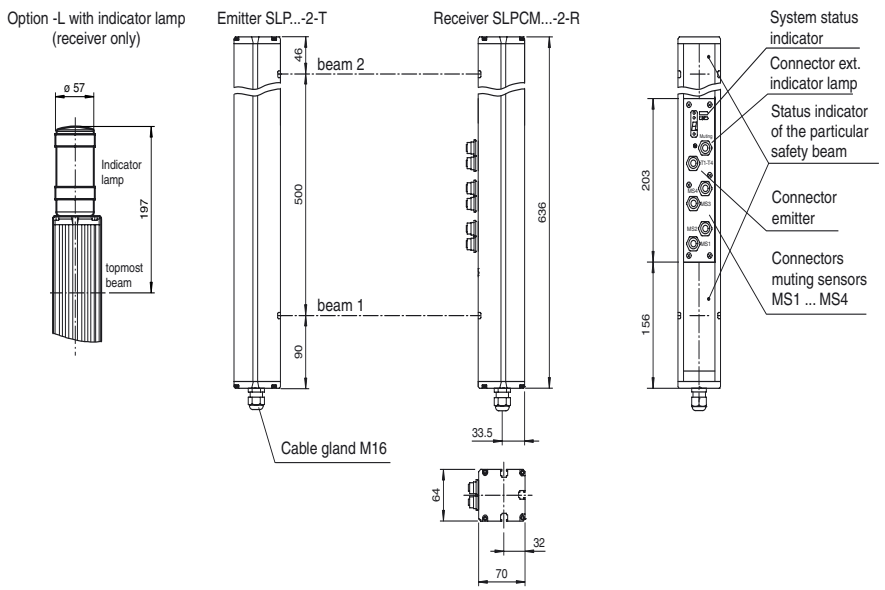
Electrical connection

Emitter SLP

T1 - Emitter channel 1
T2 - Emitter channel 2
⊥ - 0 V

Receiver SLPCM

Receiver SLPCM (semiconductor outputs)		Receiver SLPCM/31 (relay outputs)
	1 - Functional earth	
	2 - 0 V	
	3 - 24 V	
4 - n.c.		4
5 - −		5
6 - +		6
7 - OSSD 1		7
8 - OSSD 2		8
	9 - Input, Relay monitor	
	10 - Input, Start release	
	11 - Input, Reset	
	12 - PNP-output, Soiled optics	
	13 - PNP-output, Muting lamp	
	14 - PNP-output, Startup readiness	
	15 - PNP-output, Indicator OSSD OFF	
	16 - PNP-output, Indicator OSSD ON	

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

Pepperl+Fuchs Group   USA: +1 330 486 0001   Germany: +49 621 776 4411   Singapore: +65 6779 9091
www.pepperl-fuchs.com   fa-info@us.pepperl-fuchs.com   fa-info@de.pepperl-fuchs.com   fa-info@sg.pepperl-fuchs.com

PEPPERL+FUCHS
SENSING YOUR NEEDS

1

Technical data

System components

Emitter	SLP30-2-T
Receiver	SLPCM30-2-R

General specifications

Effective detection range	6 ... 30 m
Light source	LED
Light type	modulated visible red light
Tests	IEC/EN 61496
Safety type according to IEC/EN 61496	4
Marking	CE
Target size	static: 32 mm dynamic: 50 mm (at v = 1.6 m/s of the obstacle)
Beam spacing	500 mm
Number of beams	2
Operating mode	Start/restart disable, relay monitor, muting operating modes
Angle of divergence	< 5 °

Functional safety related parameters

Performance level (PL)	PL e
Category	Cat. 4
Mission Time (T_M)	20 a
PFH_d	3.54 E-9
Type	4

Indicators/operating means

Diagnostics indicator	7-segment display
Function indicator	LED red: per receiver channel off: interruption flashes: receiver continuously on: reception with sufficient stability control on the front plate: LED red: OSSD off LED green: OSSD on LED yellow: types of muting operation
Pre-fault indicator	LED red next to receiver flashes
Control elements	10 DIP switch in receiver terminal compartment

Electrical specifications

Operating voltage	U_B	24 V DC -15% / +25% , galvanically isolated
No-load supply current	I_0	max. 250 mA
Protection class		III , IEC 61140

Input

Activation current	approx. 10 mA
Activation time	0.03 ... 1 s
Test input	Reset-input for system test
Function input	Relay monitor, start release, muting sensors (max. 4)

Output

Pre-fault indication output	1 PNP, +U_B -2 V, max. 300 mA
Safety output	2 separated fail safe semiconductor outputs
Signal output	1 PNP each, max. 300 mA for start readiness, OSSD on, OSSD off, muting lamp
Switching voltage	Operating voltage -2 V
Switching current	max. 0.5 A
Response time	20 ms

Conformity

Functional safety	ISO 13849-1
Product standard	EN 61496-1 ; IEC 61496-2

Ambient conditions

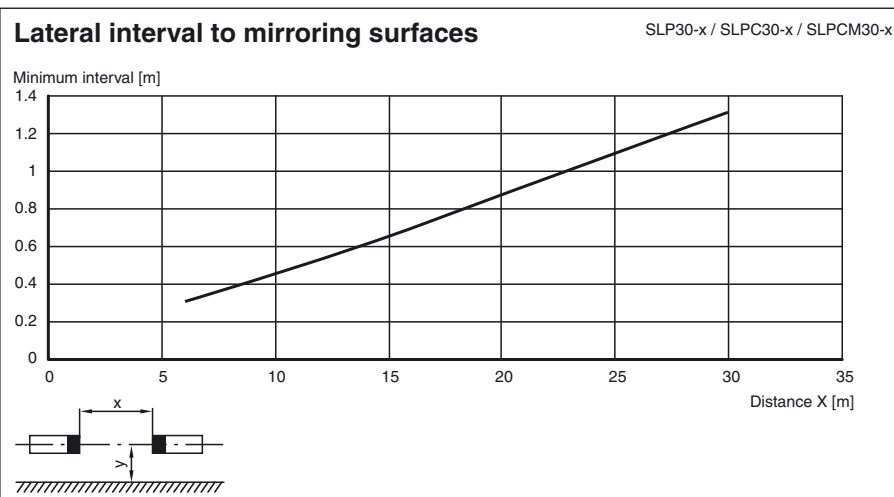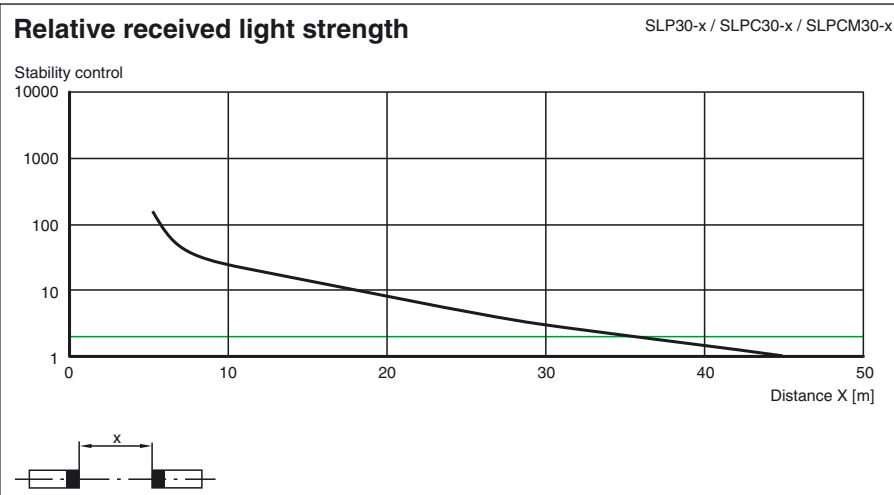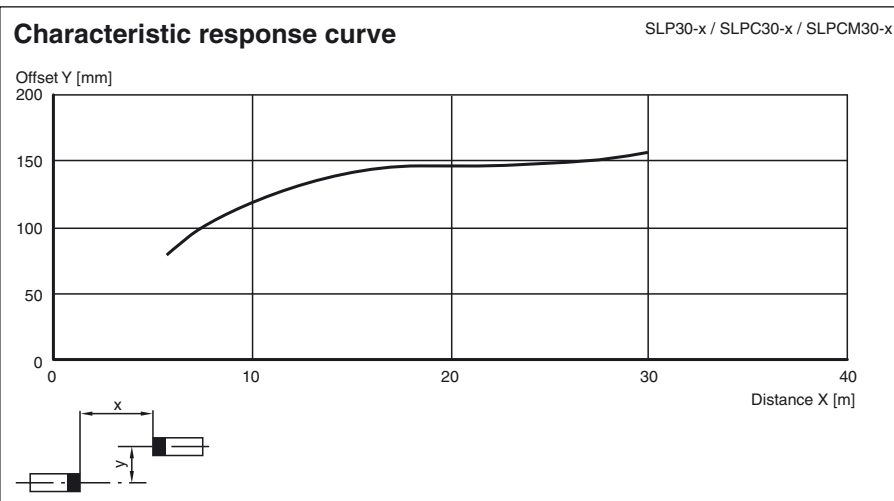|	
Ambient temperature	0 ... 50 °C (32 ... 122 °F)
Storage temperature	-20 ... 70 °C (-4 ... 158 °F)
Relative humidity	max. 95 %, not condensing

Mechanical specifications

Degree of protection	IP65
Connection	M16 cable gland , terminal compartment with cage-terminals, M12-connector for emitter, muting lamp as well as other muting sensors
Connection options	Further electrical connection options on request: Connector DIN 43 651 Hirschmann, emitter: 6-pin+PE, receiver: 11-pin+PE
Material	
Housing	extruded aluminum profile, RAL 1021 (yellow) coated
Optical face	Plastic pane
Mass	Per 2300 g

Approvals and certificates

CE conformity	CE
CCC approval	CCC approval / marking not required for products rated ≤36 V
Approvals	TÜV

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

Pepperl+Fuchs Group   USA: +1 330 486 0001   Germany: +49 621 776 4411   Singapore: +65 6779 9091
www.pepperl-fuchs.com   fa-info@us.pepperl-fuchs.com   fa-info@de.pepperl-fuchs.com   fa-info@sg.pepperl-fuchs.com

PEPPERL+FUCHS
SENSING YOUR NEEDS

Release date: 2018-01-03 08:59   Date of issue: 2018-01-03   114884_eng.xml

Curves/Diagrams

Characteristic response curve

SLP30-x / SLPC30-x / SLPCM30-x

Offset Y [mm]

Distance X [m]

Relative received light strength

SLP30-x / SLPC30-x / SLPCM30-x

Stability control

Distance X [m]

Lateral interval to mirroring surfaces

SLP30-x / SLPC30-x / SLPCM30-x

Minimum interval [m]

Distance X [m]

Additional information

Socket assignment on the front side of the device

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".
Pepperl+Fuchs Group   USA: +1 330 486 0001   Germany: +49 621 776 4411   Singapore: +65 6779 9091
www.pepperl-fuchs.com   fa-info@us.pepperl-fuchs.com fa-info@de.pepperl-fuchs.com   fa-info@sg.pepperl-fuchs.com

PEPPERL+FUCHS
SENSING YOUR NEEDS

3
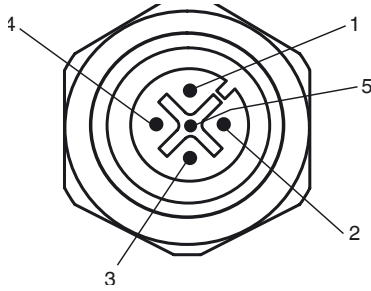
Indicator lamp control   —⊗—

Socket	Function
1	OSSD on
2	OSSD off
3	0 V
4	Readiness for startup
5	Muting (monitored)

T1 - T4 transmitter control

Socket	Function
1	Transmitter channel 1
2	Transmitter channel 2
3	0 V

Muting sensor inputs MS1 - MS4

Socket	Function
1	+ 24 V
3	0 V
4	Sensor signal

System accessories

- Mounting set MS SLP
- Profile alignment aid PA SLP/SLC
- Laser alignment aid BA SLP
- Ground pillar UC SLP/SLC
- Housing for pillar
  Enclosure UC SLP/SLC
- Collision protector
  Damping UC SLP/SLC
- Redirection mirror SLP-2-M

PEPPERL+FUCHS
SENSING YOUR NEEDS