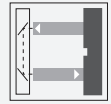




# Safety light grid with integrated control unit

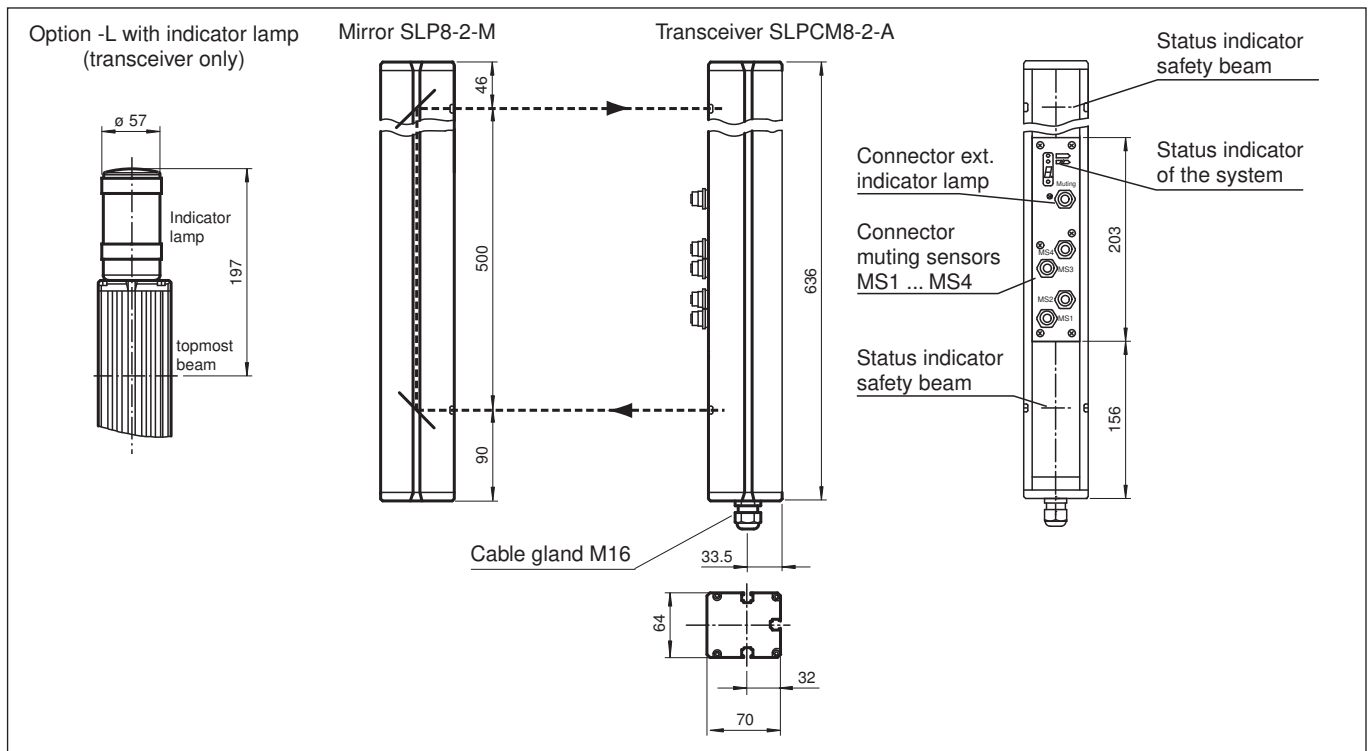


## SLPCM8-2/31

- Sensing range up to 8 m
- 2-radial design
- Beam spacing 500 mm
- Self-monitoring (type 4 according to IEC/EN 61496-1)
- Minimum wiring expense due to transceiver with passive mirror column
- 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
- Pre-fault indication
- OSSD outputs as semiconductor or relay outputs



### Dimensions



### Technical Data

System components	
Transceiver	SLPCM8-2-A/31
Mirror pillar	SLP8-2-M
General specifications	
Effective detection range	0.2 ... 8 m
Light source	LED

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

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## Technical Data

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 °
<b>Functional safety related parameters</b>		
Performance level (PL)		PL e
Category		Cat. 4
Mission Time (T <sub>M</sub> )		20 a
PFH <sub>d</sub>		3.54 E-9
B <sub>10d</sub>		see instruction manuals
Type		4
<b>Indicators/operating means</b>		
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 transceiver terminal compartment
<b>Electrical specifications</b>		
Operating voltage	U <sub>B</sub>	24 V DC -15% / +25% , galvanically isolated
No-load supply current	I <sub>0</sub>	max. 250 mA
Protection class		III , IEC 61140
<b>Input</b>		
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)
<b>Output</b>		
Pre-fault indication output		1 PNP, +U <sub>B</sub> -2 V, max. 300 mA
Safety output		2 relay outputs, force-guided NO-contact
Signal output		1 PNP each, max. 300 mA for start readiness, OSSD on, OSSD off, muting lamp
Switching voltage		20 ... 60 V DC, 12 ... 25 V AC <sub>rms</sub>
Switching current		0.01 ... 2 A
Switching power		100 VA
Response time		40 ms
<b>Conformity</b>		
Functional safety		ISO 13849-1
Product standard		EN 61496-1 ; IEC 61496-2
<b>Approvals and certificates</b>		
CE conformity		CE
Approvals		TÜV SÜD
USA		TÜV NRTL mark
<b>Ambient conditions</b>		
Ambient temperature		0 ... 50 °C (32 ... 122 °F)
Storage temperature		-20 ... 70 °C (-4 ... 158 °F)
Relative humidity		max. 95 %, not condensing

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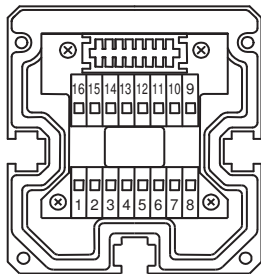
## Technical Data

### 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

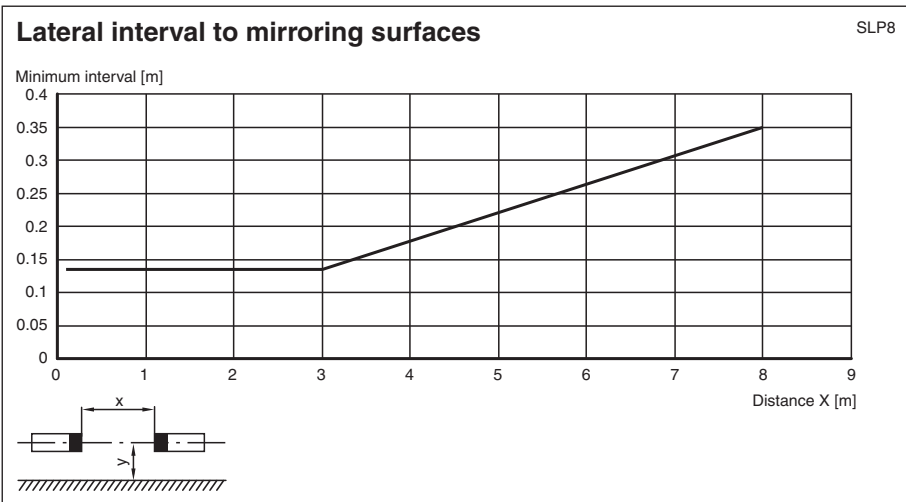
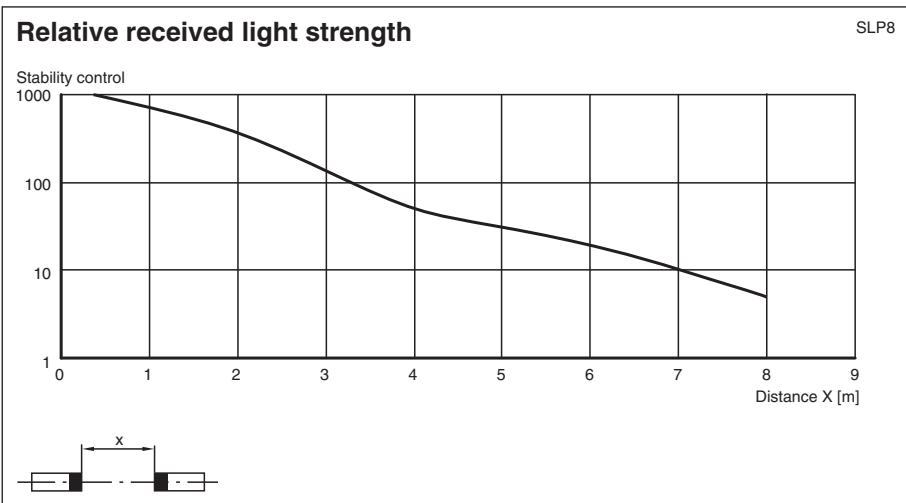
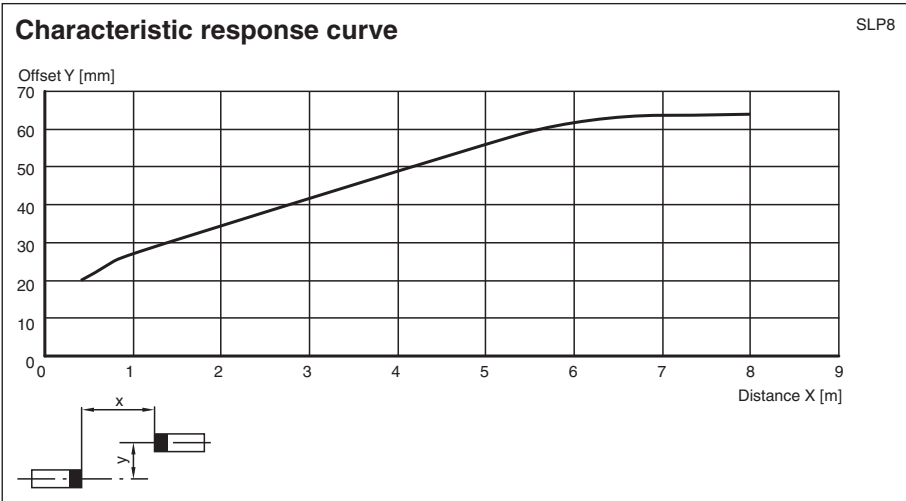
## Connection

### Transceiver SLPCM8-2-A



Transceiver SLPCM... (semiconductor output)	Transceiver SLPCM.../31 (Relay output)												
	1 - Functional earth 2 - 0 V 3 - 24 V												
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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, Meldung OSSD AUS 16 - PNP-output, Indicator OSSD ON												

**Characteristic Curve**



**Accessories**

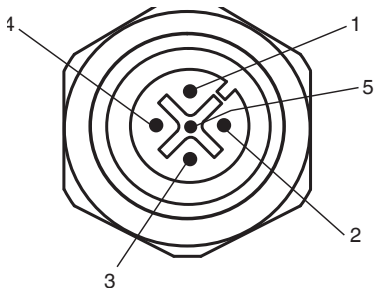
	<b>PG SLP-2</b>	Protective glass panes for SLP series
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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

## Additional information

### Socket assignment on the front side of the device



Indicator lamp control 

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

### 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/SPC
- 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