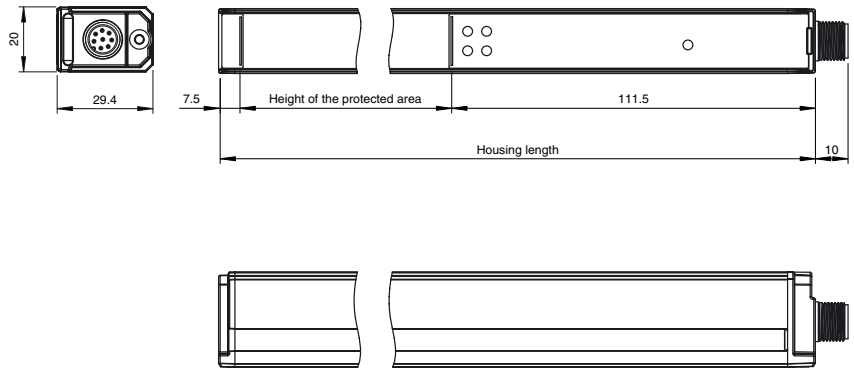




Dimensions



Model Number

SLCS14 Series

Safety light curtain
with 2 separate fail-safe semiconductor outputs

Features

- Resolution 14 mm (finger protection)
- Protection field height up to 1200 mm
- Self-monitoring (type 4 according to IEC/EN 61496-1)
- SIL3 (IEC 61508)
- Slim design, mounting on three sides

Description

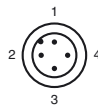
The Safety light curtain consists of a transmitter and a receiver unit. The protected area is formed by infrared light beams transmitted from the transmitter unit to the receiver unit. The spacing between the individual light beams determines the minimum obstruction size (14 mm) that can be reliably detected within the entire protected area range.

Accessories

- OMH-SLCT-01**
Quick clamp and adjustment system
- OMH-SLCT-02**
Attachment aid for OMH-SLCT-01
- OMH-SLCT-03**
Mounting bracket including adjustment
- OMH-SLCT-04**
Mounting bracket including adjustment (with loose bearing)
- OMH-SLCT-05**
Mounting bracket including adjustment
- TR 14/30/50/60**

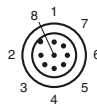
Electrical connection

Transmitter unit:



Pin	Transmitter unit
1	24 V DC
2	Mode A/B
3	0 V DC
4	Test

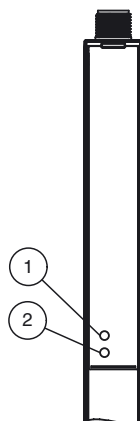
Receiver unit:



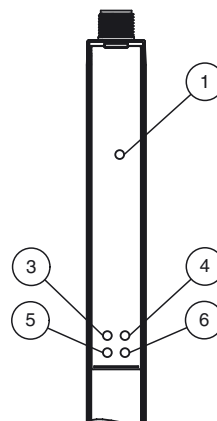
Pin	Receiver unit
1	Restart Interlock (RI)
2	24 V DC
3	Relay Monitor (RM)
4	Status / Select RI-RM
5	OSSD1
6	OSSD2
7	0 V DC
8	Mode A/B

Indicators/operating means

Transmitter unit



Receiver unit



Pin	Indicator	Color
1	Power	green
2	Mode A/B, Status	yellow
3	OSSD OFF	red
4	OSSD ON	green
5	Restart/Status	yellow
6	Mode A/B	yellow

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Technical data**General specifications**

Effective detection range	0.4 ... 8 m
Light source	IREDD
Light type	modulated infrared light , 850 nm
Approvals	TÜV, cULus
Tests	EN IEC 61496, IEC 61508 part 1,2,3,4, EN ISO 13849, EN 50178, EN 60870-5-1, EN 61000-6-3
Safety type according to IEC/EN 61496	4
Safety Integrity Level (SIL)	SIL3 (IEC 61508)
Performance level (PL)	PL e (EN ISO 13849-1)
Marking	CE (2006/42/EG)
Protection field height	see Table 1, max. 1200 mm
Operating mode	Startup/restart disable, deactivateable
Optical resolution	14 mm
Angle of divergence	5 °
Ambient light limit	Not sensitive to ambient light in accordance with EN 61496-2

Functional safety related parameters

Safety Integrity Level (SIL)	SIL 3
Performance level (PL)	PL e
Category	Cat. 4
Mission Time (T _M)	20 a
Type	4

Indicators/operating means

Operating display	green: Power on
Function display	Green: OSSD ON , Red: OSSD OFF
Status indication	Emitter unit: LED yellow: Mode, test or error Receiver: LED yellow: Start readiness, function reserve or error

Electrical specifications

Operating voltage	U _B	24 V DC (-20%, +30%) ; Power supply with safe isolation: 24 V DC
No-load supply current	I ₀	Emitter unit: ≤ 150 mA Receiver: ≤ 150 mA (without outputs)
Protection class		III , IEC 61140
Power consumption	P ₀	Emitter unit: 5 W Receiver: 15 W

Input 1

Input type	Emitter unit test
Input format	Break contact
Switching voltage	24 V DC
Input current	5 mA

Input 2

Input type	Emitter unit, mode A/B
Function	Beam Code A: open or 0 V Beam Code B: 24 V DC, 5 mA

Input 3

Input type	Receiver unit relay monitor
Input format	Break contact
Switching voltage	24 V DC
Input current	5 mA

Input 4

Input type	Receiver unit, start release
Input format	Break contact
Input current	5 mA

Input 5

Input type	Receiver unit, mode A/B (see emitter unit, mode A/B)
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Output

Response time	see Table 1, max. 54 ms
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Output 1

Output type	Receiver unit OSSD
Signal output	PNP semiconductor , monitored for short and cross circuits
Switching voltage	ON: U _B - 2 V; OFF: < 1 V
Switching current	ON: max. 0.1 A; OFF: < 5 μA

Output 2

Output type	Receiver signal output start readiness
Signal output	PNP-semiconductor, short-circuit protected, 0.1A

Ambient conditions

Ambient temperature	-30 ... 60 °C (-22 ... 140 °F)
Storage temperature	-30 ... 70 °C (-22 ... 158 °F)
Relative humidity	max. 95 %, not condensing

Mechanical specifications

Housing length L	see table 2
Protection degree	IP65 , For indoor use only

Connection
 Emitter unit: connector M12 x 1, 4-pin
 Receiver: 8-pin, M12 x 1 connector
 Cable cross section min. 0.25 mm²
 Max. cable length 50 m

Material
 Housing extruded aluminum section , gold anodized
 Optical face Plastic pane , Transparent polycarbonate
 Mass see table 2

General information

System components
 Emitter SLCS14 Series -T
 Receiver SLCS14 Series -R

Approvals and certificates

CCC approval Products with a maximum operating voltage of ≤36 V do not bear a CCC marking because they do not require approval.

Additional information

Table 1 - Response time:

Height of the protected area [mm]	Response time [ms]
100	11
200	15
300	19
400	23
500	26
600	30
700	34
800	38
900	42
1000	46
1100	50
1200	54

Table 2 - Total length and weight:

Height of the protected area [mm]	Total length of transmitter/receiver unit [mm]	Weight of transmitter/receiver unit [g]
100	219	140
200	319	200
300	419	250
400	519	310
500	619	370
600	719	430
700	819	480
800	919	540
900	1019	600
1000	1119	650
1100	1219	710
1200	1319	760

System accessories

Mounting aid

- OMH-SLCT-01 Press & Release quick clamp and adjustment system
- OMH-SLCT-02 Attachment aid for Press &Release quick clamp and adjustment system
- OMH-SLCT-03 Mounting aid with fixed bearing (long) for mounting or used to connect 2 light gids
- OMH-SLCT-04 Mounting aid with loose bearing (narrow)

Other accessories

- TR 14/30/50/60 Test rod for 14 mm, 30 mm, 50 mm or 60 mm resolution
- AA SLCT-01 Alignment aid (box level to snapped into the lateral grooves), Angle error: < 1°

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Subject to modifications without notice

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Connecting cable

V1-G-BK2M-PUR-UL:	Cable, M12, 4-pin, 2 m, UL-connector
V1-G-BK5M-PUR-UL:	Cable, M12, 4-pin, 5 m, UL-connector
V1-G-BK10M-PUR-UL:	Cable, M12, 4-pin, 10 m, UL-connector
V19-G-BK2M-PUR-UL:	Cable, M12, 8-pin, 2 m, UL-connector
V19-G-BK5M-PUR-UL:	Cable, M12, 8-pin, 5 m, UL-connector
V19-G-BK10M-PUR-UL:	Cable, M12, 8-pin, 10 m, UL-connector