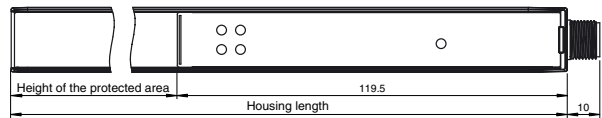
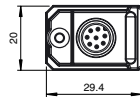
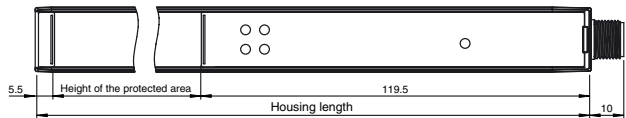




Dimensions



Height of the protected area ≤ 1200 mm



Height of the protected area > 1200 mm

Model Number

SLCT90 Series

with 2 separate fail-safe semiconductor outputs

Features

- Resolution 90 mm
- Protection field height up to 2400 mm
- Self-testing (type 2 as per IEC/EN 61496-1)
- SIL2 (IEC 61508)
- Temperature range -30°C to 60°C
- Slim design, mounting on three sides

Description

The Safety light curtain SLCT 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 (90 mm) that can be reliably detected within the entire protected area range.

Accessories

OMH-SLCT-01

Mounting aid

OMH-SLCT-02

Mounting aid

OMH-SLCT-03

Mounting aid

OMH-SLCT-04

Mounting aid

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

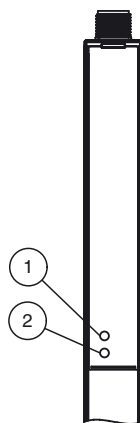
Receiver unit:



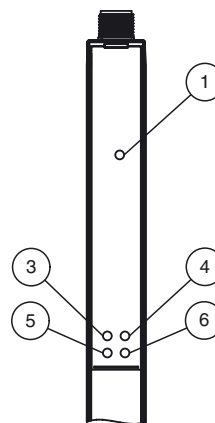
Pin	Receiver unit
1	Restart Interlock (RI)
2	24 V DC
3	Relay Monitor (RM)
4	Status / Select RI-RM
5	OSSD1
6	OSSD2
7	0 V DC
8	Mode A/B

Indicators/operating means

Transmitter unit



Receiver unit



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

Release date: 2009-12-14 11:19 Date of issue: 2009-12-14 202096_ENG.xml

Technical data**General specifications**

Effective detection range	0.2 ... 8 m
Light source	IRET Modulated light 850 nm
Light type	infrared, modulated light
Approvals	TÜV, cULus
Tests	IEC/EN 61496 ; IEC 61508
Safety type according to IEC/EN 61496	2
Safety Integrity Level (SIL)	SIL2 (IEC 61508)
Performance level (PL)	PL d (ISO 13849-1)
Marking	CE As per 98/37 EC (Machinery Directive)
Protection field height	See table 1, max. 2400 mm
Operating mode	Available with start/restart interlock
Optical resolution	90 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 2
Performance level (PL)	PL d
Category	Cat. 3
Mission Time (T _M)	20 a

Indicators/operating means

Operating display	green: Power on (emitter and receiver unit)
Function display	Green: OSSD ON , Red: OSSD OFF
Status indication	Emitter unit: LED yellow: Mode, test or error Receiver unit 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 unit ≤ 150 mA (without outputs)
Protection class		III , IEC 61140
Power consumption	P ₀	Emitter unit: 5 W Receiver unit 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. 17 ms
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Output 1

Output type	Receiver unit OSSD
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
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Ambient conditions

Ambient temperature	-30 ... 60 °C (243 ... 333 K)
Storage temperature	-30 ... 70 °C (243 ... 343 K)
Relative humidity	max. 95 %, not condensing (applies to a temperature between 20 °C and max. 50 °C)

Mechanical specifications

Length of housing L	see table 2
Protection degree	IP65
Connection	Emitter unit: connector M12 x 1, 4-pin Receiver unit connector M12 x 1, 8-pin Cable cross section min. 0.25 mm ² Max. cable length 50 m
Material	
Housing	Press-drawn aluminium section , Silver anodised

Optical face Plastic pane , Transparent polycarbonate

Mass see table 2

General information

System components

Emitter SLCT90 Series -T

Receiver SLCT90 Series -R

Additional information

Table 1 - Response time:

Height of the protected area [mm]	Response time [ms]
300	8
600	10
900	11
1200	12
1500	14
1800	15
2100	16
2400	17

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]
300	419	250
600	719	430
900	1019	600
1200	1319	760
1500	1625	940
1800	1925	1100
2100	2225	1270
2400	2525	1440

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°

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

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