

## Datasheet - SLC 440-E/R0250-14-01

Safety light curtains, Safety light grids / Safety light curtains / SLC 440



(Minor differences between the printed image and the original product may exist!)

- Safety type 4 in accordance with IEC 61496-1
- User-friendly parameter setting, no tools required
- Reliable safety concept in case of interferences (EMC, welding sparks)
- Process safety with highest availability
- Integrated set-up tool

### Ordering details

|                          |                       |
|--------------------------|-----------------------|
| Product type description | SLC 440-E/R0250-14-01 |
| Article number           | 101216616             |
| EAN code                 | 4030661409023         |

### Approval

Approval



### Classification

|                  |                            |
|------------------|----------------------------|
| Standards        | EN ISO 13849-1, EN 62061   |
| PL               | up e                       |
| Control category | up 4                       |
| PFH value        | 5.14 x 10 <sup>-9</sup> /h |
| SIL              | up 3                       |
| Mission time     | 20 Years                   |

### Global Properties

|                                                                                                                          |                                  |
|--------------------------------------------------------------------------------------------------------------------------|----------------------------------|
| Product name                                                                                                             | SLC 440 Sicherheits-Lichtvorhang |
| Standards                                                                                                                | EN 61496-1; CLC/TS 61496-2       |
| Compliance with the Directives (Y/N)  | Yes                              |

|                                                 |                    |
|-------------------------------------------------|--------------------|
| Operating resource protection class             | Protection class 3 |
| Safety type in accordance with IEC 61496-1      | 4                  |
| Materials                                       |                    |
| - Material of the housings                      | Aluminium          |
| Weight                                          |                    |
| Beam coding (Y/N)                               | Yes                |
| Protection field height                         | 250 mm             |
| Range of the protection field                   | 300 - 7000 mm      |
| Reaction time                                   | 10 ms              |
| Wave length of the sensors                      | 880                |
| Fade-out is possible (Y/N)                      | Yes                |
| Override possible (Y/N)                         | No                 |
| reduced resolution (Y/N)                        | No                 |
| Clock control possible (Y/N)                    | No                 |
| Muting possible (Y/N)                           | No                 |
| Restart block (Y/N)                             | Yes                |
| Master/slave function                           | No                 |
| Cascadable (Y/N)                                | No                 |
| Monitoring function of downstream devices (Y/N) | Yes                |
| Recommended safety-monitoring module            | SRB 301MC          |

## Mechanical data

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|                                   |                            |
|-----------------------------------|----------------------------|
| Detection ability for test bodies | 14 mm                      |
| Number of beams                   | 24 piece                   |
| Design of electrical connection   | Connector                  |
| - Wiring of the transmitter       | connector plug M12, 4-pole |
| - Wiring of the receiver          | connector plug M12, 8-pole |
| Cable length                      | 100 m                      |

## Ambient conditions

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|                                          |                      |
|------------------------------------------|----------------------|
| Ambient temperature                      |                      |
| - Min. environmental temperature         | -10 °C               |
| - Max. environmental temperature         | +50 °C               |
| Storage and transport temperature        |                      |
| - Min. Storage and transport temperature | -25 °C               |
| - Max. Storage and transport temperature | +70 °C               |
| Protection class                         | IP67 to IEC/EN 60529 |

## Electrical data

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|                                             |            |
|---------------------------------------------|------------|
| Design of output switching element OSSD     | PNP        |
| Power consumption                           |            |
| - Power consumption Transmitter             | 1.8 W      |
| - Power consumption Receiver                | 3.8 W      |
| Voltage type                                | DC         |
| Switching voltage of the OSSD in high state | 24 V ± 10% |
| Integrated contactor control (Y/N)          | Yes        |

## Outputs

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|                                       |        |
|---------------------------------------|--------|
| Max. output current at secured output | 250 mA |
|---------------------------------------|--------|

Electrical data - Safety outputs

|                                         |         |
|-----------------------------------------|---------|
| Number of secure semi-conductor outputs | 2 piece |
| Number of secure outputs with contact   | 0 piece |

LED switching conditions display

|                                        |     |
|----------------------------------------|-----|
| LED switching conditions display (Y/N) | Yes |
| - Status and diagnostics               | Yes |
| - 7-segment display                    |     |

ATEX

|                                           |      |
|-------------------------------------------|------|
| Explosion protection categories for gases | None |
| Explosion protected category for dusts    | None |

Dimensions

|                          |         |
|--------------------------|---------|
| Dimensions of the sensor |         |
| - Width of sensor        | 27.8 mm |
| - Height of sensor       | 331 mm  |
| - Length of sensor       | 33 mm   |

notice

In case of failure (interruption of the 0 V supply) the maximum leakage current is 1 mA.

Included in delivery

|                                     |                                        |
|-------------------------------------|----------------------------------------|
| Delivery scope of disposable system | Transmitter + receiver, Mounting angle |
|-------------------------------------|----------------------------------------|

Indication legend

A: total length (Protection field height + 81 mm)

Ordering code

|                       |                                 |
|-----------------------|---------------------------------|
| SLC 440-E/R(1)-(2)-01 |                                 |
| (1)                   |                                 |
| 0170                  | Protection field height 170 mm  |
| 0250                  | Protection field height 250 mm  |
| 0330                  | Protection field height 330 mm  |
| 0410                  | Protection field height 410 mm  |
| 0490                  | Protection field height 490 mm  |
| 0570                  | Protection field height 570 mm  |
| 0650                  | Protection field height 650 mm  |
| 0730                  | Protection field height 730 mm  |
| 0810                  | Protection field height 810 mm  |
| 0890                  | Protection field height 890 mm  |
| 0970                  | Protection field height 970 mm  |
| 1050                  | Protection field height 1050 mm |
| 1130                  | Protection field height 1130 mm |

|             |                                                                           |
|-------------|---------------------------------------------------------------------------|
| <b>1210</b> | Protection field height 1210 mm                                           |
| <b>1290</b> | Protection field height 1290 mm <i>(Only for Resolution 30 mm, 50 mm)</i> |
| <b>1370</b> | Protection field height 1370 mm <i>(Only for Resolution 30 mm, 50 mm)</i> |
| <b>1450</b> | Protection field height 1450 mm <i>(Only for Resolution 30 mm, 50 mm)</i> |
| <b>1530</b> | Protection field height 1530 mm <i>(Only for Resolution 30 mm, 50 mm)</i> |
| <b>1610</b> | Protection field height 1610 mm <i>(Only for Resolution 30 mm, 50 mm)</i> |
| <b>1690</b> | Protection field height 1690 mm <i>(Only for Resolution 30 mm, 50 mm)</i> |
| <b>1770</b> | Protection field height 1770 mm <i>(Only for Resolution 30 mm, 50 mm)</i> |
| <b>(2)</b>  |                                                                           |
| <b>14</b>   | Resolution 14 mm, Range 0,3 m ... 7 m                                     |
| <b>30</b>   | Resolution 30 mm, Range 0,3 m ... 10 m                                    |

## Documents

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### Operating instructions and Declaration of conformity (es) 582 kB, 14.08.2012

Code: mrl\_slc440\_es

### Operating instructions and Declaration of conformity (it) 580 kB, 23.07.2012

Code: mrl\_slc440\_it

### Operating instructions and Declaration of conformity (pt) 582 kB, 26.09.2012

Code: mrl\_slc440\_pt

### Operating instructions and Declaration of conformity (jp) 712 kB, 24.07.2012

Code: mrl\_slc440\_jp

### Operating instructions and Declaration of conformity (de) 891 kB, 14.05.2012

Code: mrl\_slc440\_de

### Operating instructions and Declaration of conformity (en) 1 MB, 14.05.2012

Code: mrl\_slc440\_en

### Operating instructions and Declaration of conformity (da) 584 kB, 09.08.2012

Code: mrl\_slc440\_da

### BG-test certificate (de, en) 24 kB, 07.11.2011

Code: z\_slcp03

### Brochure (en) 1 MB, 27.03.2012

Code: b\_slcp06\_en

### Brochure (de) 1 MB, 14.11.2011

Code: b\_slcp06\_de

### Brochure (fr) 783 kB, 20.03.2012

Code: b\_slcp06\_fr

### Brochure (es) 1 MB, 01.02.2012

Code: b\_slcp06\_es

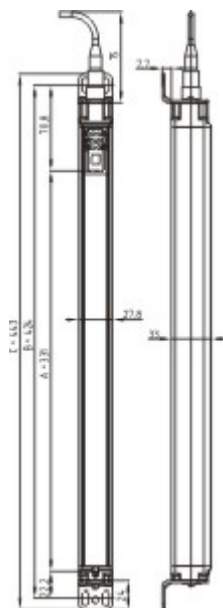
### Brochure (pt) 808 kB, 02.04.2012

Code: b\_slcp06\_pt

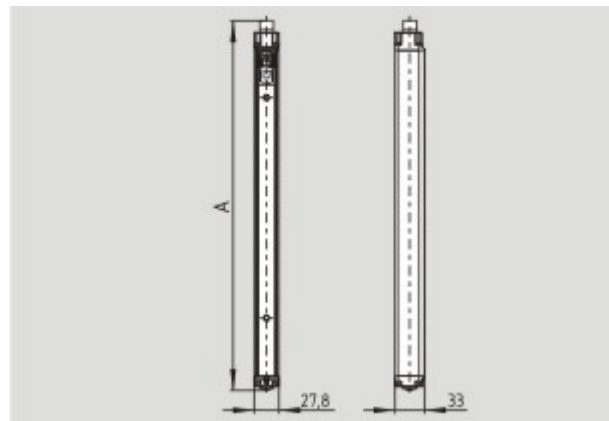
### Brochure (pl) 803 kB, 12.03.2012

Code: b\_slcp06\_pl

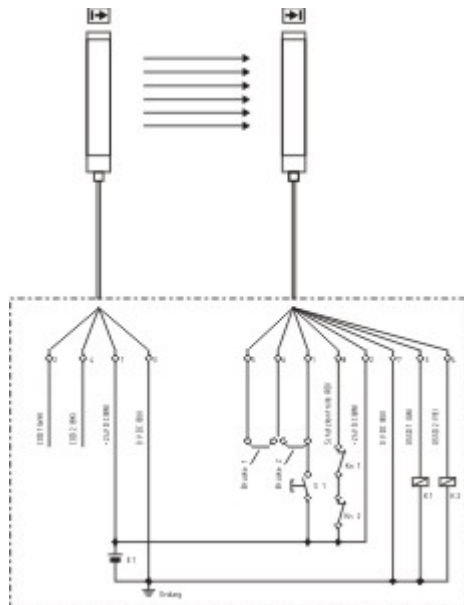
Images



Dimensional drawing (basic component)



Dimensional drawing (basic component)



## System components

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### Safety control modules



#### SRB 301MC

- Fit for signal evaluation of outputs of safety magnetic switches
- 3 safety contacts, STOP 0
- 1 Signalling output
- Suitable for signal processing of potential-free outputs, e.g. emergency stop command devices, position switches and solenoid interlocks

### Connector



#### A-K8M12

- Pre-wired cable
- 8-pole



#### A-K4M12

- Pre-wired cable
- 4-pole

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The data and values have been checked thoroughly. Technical modifications and errors excepted.

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