

## Datasheet - SLC440-ER-0970-14-01

Safety light curtains, Safety light grids / Safety light curtains / SLC440



- 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

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

### Ordering details

Product type description	SLC440-ER-0970-14-01
Article number	101216625
EAN Code	4030661409115
eCl@ss	27-27-27-04

### 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> /
SIL	up 3
Mission time	20 Years

### Global Properties

Permanent light	SLC440 Sicherheits-Lichtvorhang
Standards	EN 61496-1; EN 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	1600
Beam coding (Y/N)	Yes
Protection field height	970
Range of the protection field	300 - 7000
Reaction time	20
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 301

### Mechanical data

Detection ability for test bodies	14
Number of beams	96
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

### Ambient conditions

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

### Electrical data

Design of output switching element OSSD	PNP
Power consumption	
- Power consumption Transmitter	< 5
- Power consumption Receiver	< 10
Voltage type	DC
Switching voltage of the OSSD in high state	24 ± 10
Integrated contactor control (Y/N)	Yes

## Outputs

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Max. output current at secured output 250

## Electrical data - Safety outputs

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Number of secure semi-conductor outputs 2

Number of secure outputs with contact 0

## LED switching conditions display

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LED switching conditions display (Y/N) Yes

- Status and diagnostics Yes

- 7-segment display Yes

## ATEX

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Explosion protection categories for gases None

Explosion protected category for dusts None

## Dimensions

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Dimensions of the sensor

- Width of sensor 27.8

- Height of transmitter 1051

- Height of Receiver 1061

- Length of sensor 33

## notice

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

## Included in delivery

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Delivery scope of disposable system Transmitter + receiver, Mounting angle

## Indication legend

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

## Ordering code

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SLC440-ER(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
1210	Protection field height 1210 mm
1290	Protection field height 1290 mm <i>(Only for Resolution 30 mm, 50 mm)</i>
1370	Protection field height 1370 mm <i>(Only for Resolution 30 mm, 50 mm)</i>
1450	Protection field height 1450 mm <i>(Only for Resolution 30 mm, 50 mm)</i>
1530	Protection field height 1530 mm <i>(Only for Resolution 30 mm, 50 mm)</i>
1610	Protection field height 1610 mm <i>(Only for Resolution 30 mm, 50 mm)</i>
1690	Protection field height 1690 mm <i>(Only for Resolution 30 mm, 50 mm)</i>
1770	Protection field height 1770 mm <i>(Only for Resolution 30 mm, 50 mm)</i>
(2)	
14	Resolution 14 mm, Range 0,3 m ... 7 m
30	Resolution 30 mm, Range 0,3 m ... 10 m

## Documents

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**Operating instructions and Declaration of conformity** (it) 627 kB, 15.04.2016

Code: mrl\_slc440\_it

**Operating instructions and Declaration of conformity** (de) 555 kB, 22.03.2016

Code: mrl\_slc440\_de

**Operating instructions and Declaration of conformity** (fr) 561 kB, 17.10.2018

Code: mrl\_slc440\_fr

**Operating instructions and Declaration of conformity** (pt) 554 kB, 17.10.2018

Code: mrl\_slc440\_pt

**Operating instructions and Declaration of conformity** (cn) 904 kB, 23.11.2018

Code: mrl\_slc440\_cn

**Operating instructions and Declaration of conformity** (nl) 650 kB, 31.07.2018

Code: mrl\_slc440\_nl

**Operating instructions and Declaration of conformity** (cs) 573 kB, 17.10.2018

Code: mrl\_slc440\_cs

**Operating instructions and Declaration of conformity** (pl) 727 kB, 20.06.2016

Code: mrl\_slc440\_pl

**Operating instructions and Declaration of conformity** (jp) 965 kB, 18.09.2017

Code: mrl\_slc440\_jp

**Operating instructions and Declaration of conformity** (es) 572 kB, 08.04.2016

Code: mrl\_slc440\_es

**Operating instructions and Declaration of conformity** (en) 564 kB, 22.03.2016

Code: mrl\_slc440\_en

**BG-test certificate** (en, de) 1 MB, 25.03.2015

Code: z\_slcp03

**Brochure** (it) 2 MB, 01.03.2018

Code: b\_optoshort\_it

**Brochure** (pt) 2 MB, 26.10.2018

Code: b\_optoshort\_pt

**Brochure** (es) 2 MB, 23.10.2018

Code: b\_optoshort\_es

**Brochure** (fr) 2 MB, 20.11.2018

Code: b\_optoshort\_fr

**Brochure** (en) 2 MB, 23.10.2018

Code: b\_optoshort\_en

**Brochure** (pl) 2 MB, 20.02.2019

Code: b\_optoshort\_pl

**Brochure** (de) 2 MB, 22.10.2018

Code: b\_optoshort\_de

**Brochure** (pt) 1 MB, 12.04.2018

Code: b\_slc440-familie\_pt

**Brochure** (cn) 1 MB, 12.04.2018

Code: b\_slc440-familie\_cn

**Brochure** (de) 917 kB, 04.07.2018

Code: b\_slc440-familie\_de

**Brochure** (en) 1 MB, 04.07.2018

Code: b\_slc440-familie\_en

**Brochure** (fr) 1 MB, 12.04.2018

Code: b\_slc440-familie\_fr

**Brochure** (es) 1 MB, 12.04.2018

Code: b\_slc440-familie\_es

**Brochure** (nl) 1 MB, 04.07.2018

Code: b\_slc440-familie\_nl

**Brochure** (it) 1 MB, 12.04.2018

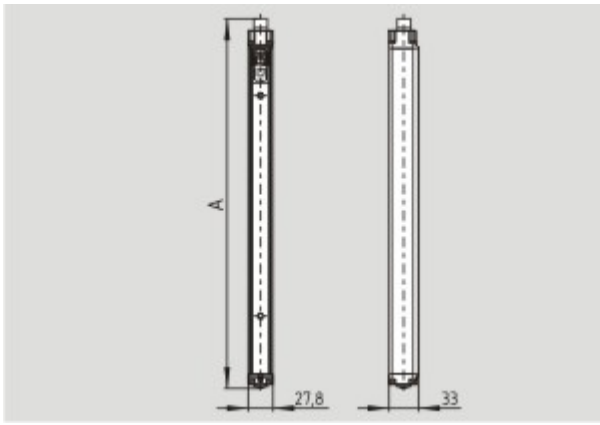
Code: b\_slc440-familie\_it

**EAC certification** (ru) 772 kB, 05.10.2015

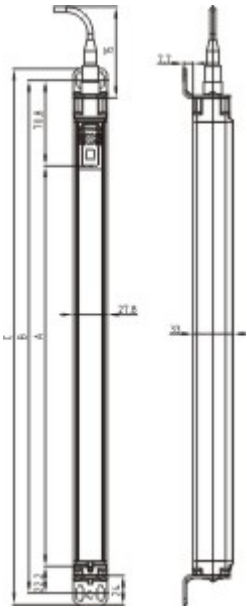
Code: q\_6395p17\_ru

**EAC certification** (ru) 1 MB, 15.03.2018

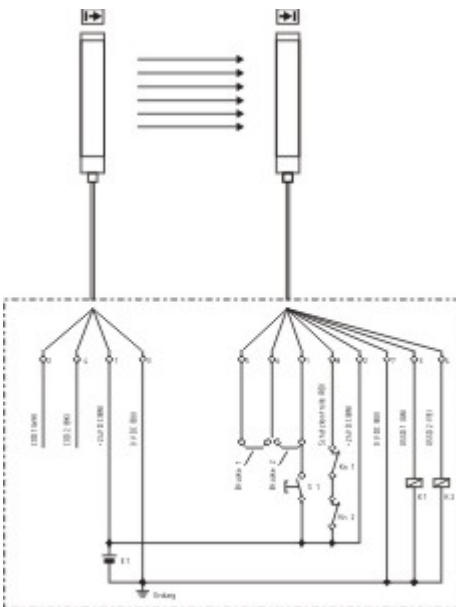
Code: q\_slbp01



Dimensional drawing (basic component)



Dimensional drawing (basic component)



Wiring example

## System components

## 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 outputs connected to potentials (AOPDs), e.g. safety light grids/curtains
  - Suitable for signal processing of potential-free outputs, e.g. emergency stop command devices, position switches and solenoid interlocks
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#### **Connector**



#### **KA-08**

- for Transmitter
  - Pre-wired cable
  - 4-pole
  - for SLC/SLG
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#### **KA-09**

- Pre-wired cable
  - 8-pole
  - for SLC/SLG
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The data and values have been checked thoroughly. Technical modifications and errors excepted.

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