

Datasheet - SLC 420-E/R0170-14-69-RFB

Safety light curtains, Safety light grids / Safety light curtains / SLC 420 IP 69K



- Protection class IP69K
- Safety type 4 in accordance with IEC 61496-1
- Resolution 14 mm and 30 mm
- Protection field height from 170 mm ... 1450 mm

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

Ordering details

Product type description	SLC 420-E/R0170-14-69-RFB
Article number	101207003
EAN Code	4030661376554
eCl@ss	27-27-27-04

Approval


Approval



Classification

Standards	EN ISO 13849-1, IEC 61508
PL	up e
Control category	up 4
PFH value	7.42 x 10 ⁻⁹ /h
SIL	up 3
Mission time	20 Years

Global Properties

Permanent light	SLC 420 IP 69K Sicherheits-Lichtvorhang
Standards	IEC/EN 61496-1/-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	170
Range of the protection field	300 - 7000
Reaction time	10
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	SRB301ST SCR 211

Mechanical data

Detection ability for test bodies	14
Number of beams	16
Design of electrical connection	Connector
- Wiring of the transmitter	cable with connector M12, 4-pole
- Wiring of the receiver	cable with connector M12, 8-pole
Cable length	5

Ambient conditions

Ambient temperature	
- Min. environmental temperature	-10
- Max. environmental temperature	+50
Storage and transport temperature	
- Min. Storage and transport temperature	-25
- Max. Storage and transport temperature	+70
Protection class	IP69K to IEC/EN 60529

Electrical data

Design of output switching element OSSD	PNP
Power consumption	
- Power consumption Transmitter	4
- Power consumption Receiver	8
Voltage type	DC
Switching voltage of the OSSD in high state	24 V ± 20%

Outputs

Max. output current at secured output	500
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Electrical data - Safety outputs

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

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	
- Height of sensor	267
- Diameter of sensor	60

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
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Indication legend

A: total length (Protection field height + 97 mm)

Ordering code

SLC 420-E/R(1)-(2)-69-RFB

(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
1370	Protection field height 1370 mm
1450	Protection field height 1450 mm
(2)	
14	Resolution 14 mm, Range 0,3 m ... 7 m
30	Resolution 30 mm, Range 0,3 m ... 10 m

Documents

Operating instructions and Declaration of conformity (es) 530 kB, 12.12.2016

Code: mrl_slc420slg420_es

Operating instructions and Declaration of conformity (nl) 573 kB, 31.07.2018

Code: mrl_slc420slg420_nl

Operating instructions and Declaration of conformity (br) 524 kB, 18.12.2018

Code: ACE_mrl_slc420slg420_br

Operating instructions and Declaration of conformity (fr) 533 kB, 03.01.2017

Code: mrl_slc420slg420_fr

Operating instructions and Declaration of conformity (pt) 528 kB, 09.03.2017

Code: mrl_slc420slg420_pt

Operating instructions and Declaration of conformity (it) 525 kB, 12.06.2017

Code: mrl_slc420slg420_it

Operating instructions and Declaration of conformity (en) 676 kB, 27.09.2016

Code: mrl_slc420slg420_en

Operating instructions and Declaration of conformity (pl) 554 kB, 02.02.2017

Code: mrl_slc420slg420_pl

Operating instructions and Declaration of conformity (de) 676 kB, 27.09.2016

Code: mrl_slc420slg420_de

Operating instructions and Declaration of conformity (it) 448 kB, 10.01.2012

Code: mrl_slc420ip69_it

Operating instructions and Declaration of conformity (de) 451 kB, 04.10.2011

Code: mrl_slc420ip69_de

Operating instructions and Declaration of conformity (cs) 450 kB, 17.07.2012

Code: mrl_slc420ip69_cs

Operating instructions and Declaration of conformity (pt) 454 kB, 16.07.2012

Code: mrl_slc420ip69_pt

Operating instructions and Declaration of conformity (fr) 453 kB, 27.01.2012

Code: mrl_slc420ip69_fr

Operating instructions and Declaration of conformity (pl) 378 kB, 11.09.2013

Code: mrl_slc420ip69_pl

Operating instructions and Declaration of conformity (da) 458 kB, 07.08.2012

Code: mrl_slc420ip69_da

Operating instructions and Declaration of conformity (jp) 789 kB, 12.10.2011

Code: mrl_slc420ip69_jp

Operating instructions and Declaration of conformity (en) 450 kB, 07.10.2011

Code: mrl_slc420ip69_en

Operating instructions and Declaration of conformity (es) 458 kB, 27.09.2011

Code: mrl_slc420ip69_es

BG-test certificate (de, en) 474 kB, 29.10.2015

Code: z_slcp01

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, 03.08.2018

Code: b_optoshort_pl

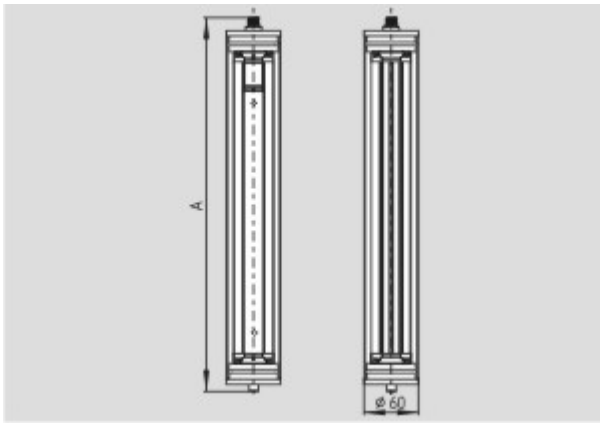
Brochure (de) 2 MB, 22.10.2018

Code: b_optoshort_de

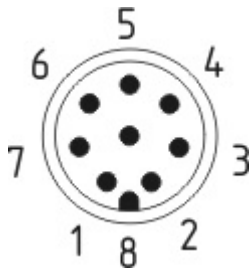
EAC certification (ru) 1 MB, 15.03.2018

Code: q_slbp01

Images



Dimensional drawing (basic component)



Contact arrangement

System components

Safety control modules



SRB301ST

- Suitable for signal processing of potential-free outputs, e.g. emergency stop command devices, position switches and solenoid interlocks
- Suitable for signal processing of outputs connected to potentials (AOPDs), e.g. safety light grids/curtains
- Fit for signal evaluation of outputs of safety magnetic switches
- 3 safety contacts, STOP 0
- 1 Signalling output



SRB 301LC/B

- Fit for signal evaluation of outputs of safety magnetic switches (to this end, integrated current and voltage limiters)
- Suitable for signal processing of potential-free outputs, e.g. emergency stop command devices, position switches and solenoid interlocks
- Suitable for signal processing of outputs connected to potentials (AOPDs), e.g. safety light grids/curtains
- 3 safety contacts, STOP 0
- 1 Signalling output

Connector



KA-08

- for Transmitter
- Pre-wired cable
- 4-pole
- for SLC/SLG

KA-09



- Pre-wired cable
- 8-pole
- for SLC/SLG

Configuration software



103010773 - SLC4V430

- Configuration software

K.A. Schmersal GmbH & Co. KG, Möddinghofe 30, D-42279 Wuppertal

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

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