

Technical data sheet Safety light curtain receiver

Part no.: 68023103

MLC520R14-300MG



Contents

- Technical data
- Dimensioned drawings
- Electrical connection
- Suitable transmitters
- Part number code
- Notes
- Accessories













Technical data



Basic data

Series	MLC 500
Device type	Receiver
Cascading	Middle Guest
Contains	2x BT-NC sliding block
Application	Finger protection

Characteristic parameters

Туре	4, IEC/EN 61496
SIL	3, IEC 61508
SILCL	3, IEC/EN 62061
Performance Level (PL)	e, EN ISO 13849-1
Mission time T _M	20 years, EN ISO 13849-1
Category	4, EN ISO 13849

Protective field data

Resolution	14 mm
Protective field height	300 mm

Optical data

Number of beams 30 Piece(s)

Time behavior

7 ms, plus response times of the Host/ Guest devices Response time

Connection

Sheathing material

Thread size

No. of pins

Material

Number of connections		2 Piece(s)
	Connection 1	
Fu	Function	Cascade, Host In
	Type of connection	Cable with connector
	Cable length	330 mm
	Sheathing material	PUR
	Thread size	M12
	Material	Plastic
	No. of pins	8 -pin
	Connection 2	
	Function	Cascade, Guest Out
	Type of connection	Cable with connector
	Cable length	330 mm

PUR

M12

Plastic

8 -pin

Mechanical data

Dimension (W x H x L)	29 mm x 314 mm x 53 mm	
Housing material	Metal	
Metal housing	Aluminum	
Lens cover material	Plastic / PMMA	
Material of end caps	Diecast zinc	
Net weight	498 g	
Housing color	Yellow, RAL 1021	
Type of fastening	Groove mounting	
	Mounting brackets	
	Swivel mount	

Environmental data

Ambient temperature, operation	0 55 °C
Ambient temperature, storage	-30 70 °C
Relative humidity (non-condensing)	0 95 %

Certifications

Degree of protection	IP 65
Protection class	III
Certifications	c TÜV NRTL US
	c UL US
	TÜV Süd
Vibration resistance	50 m/s ²
Shock resistance	100 m/s ²
US patents	US 6,418,546 B

Classification

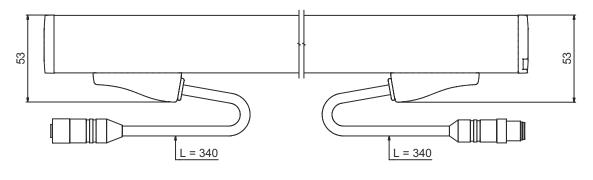
Customs tariff number	85365019
ECLASS 5.1.4	27272704
ECLASS 8.0	27272704
ECLASS 9.0	27272704
ECLASS 10.0	27272704
ECLASS 11.0	27272704
ECLASS 12.0	27272704
ECLASS 13.0	27272704
ECLASS 14.0	27272704
ETIM 5.0	EC002549
ETIM 6.0	EC002549
ETIM 7.0	EC002549
ETIM 8.0	EC002549
ETIM 9.0	EC002549

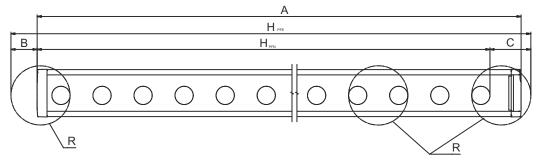
Dimensioned drawings



All dimensions in millimeters

Calculation of the effective protective field height H_{PFE} = H_{PFN} + B + C





 H_{PFE} Effective protective field height = 312 mm

H_{PFN} Nominal protective field height = 300 mm

Total height = 314 mm

6 mm

- С
- Effective protective field height H_{PFE} goes beyond the dimensions of the optics area to the outer borders of the circles labeled with R.

Electrical connection

Connection 1

Function	Cascade, Host In
Type of connection	Cable with connector
Cable length	330 mm
Sheathing material	PUR
Cable color	Black
Type of stranding	Pair stranding (twisted pair)
Wire cross section	0.14 mm ²
Thread size	M12
Туре	Male
Material	Plastic
No. of pins	8 -pin
Encoding	A-coded

Connection 2

Function	Cascade, Guest Out
Type of connection	Cable with connector
Cable length	330 mm
Sheathing material	PUR
Cable color	Black
Wire cross section	0.14 mm²

Electrical connection



Connection 2

Type of stranding	Pair stranding (twisted pair)
Thread size	M12
Туре	Female
Material	Plastic
No. of pins	8 -pin
Encoding	A-coded

Suitable transmitters

Part no.	Designation	Article	Description
68022103	MLC500T14-300MG	Safety light curtain transmitter	Resolution: 14 mm Protective field height: 300 mm Operating range: 0 6 m Connection: Cable with connector, M12, Plastic, 8 -pin, 330 mm, PUR

Part number code

Part designation: MLCxvv-za-hhhhei-ooo

MLC	Safety light curtain
х	Series 3: MLC 300 5: MLC 500
уу	Function classes 00: transmitter 01: transmitter (AIDA) 02: transmitter with test input 10: basic receiver - automatic restart 11: basic receiver - automatic restart (AIDA) 20: standard receiver - EDM/RES selectable 30: extended receiver - blanking/muting
Z	Device type T: transmitter R: receiver
a	Resolution 14: 14 mm 20: 20 mm 30: 30 mm 40: 40 mm 90: 90 mm
hhhh	Protective field height 150 3000: from 150 mm to 3000 mm
е	Host/Guest (optional) H: Host MG: Middle Guest G: Guest
i	Interface (optional) /A: AS-i
000	Option /V: high Vibration-proof EX2: explosion protection (zones 2 + 22) SPG: Smart Process Gating

Note



 $\ ^{\mbox{\tiny $\mbox{$\psi$}}}$ A list with all available device types can be found on the Leuze website at www.leuze.com.

Notes





Observe intended use!



- by Only use the product in accordance with its intended use.

Accessories

Connection technology - Interconnection cables

	Part no.	Designation	Article	Description
	429278	CB-M12-2000E-8TP	Interconnection cable	Connection 1: Connector, M12, Axial, Female, A-coded, 8 -pin Connection 2: Connector, M12, Axial, Male, A-coded, 8 -pin Shielded: Yes Cable length: 2,000 mm Sheathing material: PUR

Mounting technology - Mounting brackets

	Part no.	Designation	Article	Description
11111111	429006	BT-2L-HG	Mounting device set	Mounting bracket, at device: Screw type Material: Metal

Mounting technology - Swivel mounts

	Part no.	Designation	Article	Description
P.C.	429395	BT-2HF-G	Mounting bracket set	Fastening, at system: Through-hole mounting Mounting bracket, at device: Clampable Type of mounting device: Turning, 360° Material: Metal, Plastic

Services

Part no.	Designation	Article	Description
S981050	CS40-I-140	Safety inspection	Details: Checking of a safety light barrier application in accordance with current standards and guidelines. Inclusion of the device and machine data in a database, production of a test log per application. Conditions: It must be possible to stop the machine, support provided by customer's employees and access to the machine for Leuze employees must be ensured.

Leuze electronic GmbH + Co. KG The Sensor People In der Braike 1, D-73277 Owen/Germany Phone: +49 7021 573-0 • Fax: +49 7021 573-199 eng • 2024-07-06

Accessories



Part no.	Designation	Article	Description
S981046	CS40-S-140	Start-up support	Details: For safety devices including stopping time measurement and initial inspection. Conditions: Devices and connection cables are already mounted, price not including travel costs and, if applicable, accommodation expenses.

ot	



🔖 A list with all available accessories can be found on the Leuze website in the Download tab of the article detailed page.

We reserve the right to make technical changes