## Leuze

## **Technical data sheet** Safety light curtain receiver

## Part no.: 68023906 MLC520R90-600MG



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## **Technical data**

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#### Basic data

Series	MLC 500
Device type	Receiver
Cascading	Middle Guest
Contains	2x BT-NC sliding block
Application	Access guarding
	Danger zone guarding

#### **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 <sub>M</sub>	20 years, EN ISO 13849-1
Category	4, EN ISO 13849

#### **Protective field data**

No. of pins

Resolution	90 mm		
Protective field height	600 mm		
Optical data			
Number of beams	8 Piece(s)		
Timing			
Response time	2 ms		
Connection			
Number of connections	2 Piece(s)		
Connection 1 Function	Occasedo Hastin		
	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		
Sheathing material	PUR		
Thread size	M12		
Material	Plastic		

8 -pin

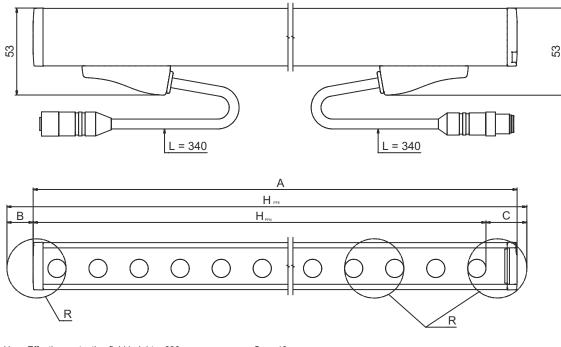
### Mechanical data

Dimension (W x H x L)	29 mm x 614 mm x 53 mm
Housing material	Metal, Aluminum
Lens cover material	Plastic / PMMA
Material of end caps	Diecast zinc
Net weight	798 g
Housing color	Yellow, RAL 1021
Type of fastening	Groove mounting
	Mounting bracket
	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 CSA US
	c TÜV NRTL US
	TÜV Süd
Vibration resistance	TÜV Süd 50 m/s²
Vibration resistance Shock resistance	
	50 m/s²
Shock resistance	50 m/s <sup>2</sup> 100 m/s <sup>2</sup>
Shock resistance US patents	50 m/s <sup>2</sup> 100 m/s <sup>2</sup>
Shock resistance US patents Classification	50 m/s <sup>2</sup> 100 m/s <sup>2</sup> US 6,418,546 B
Shock resistance US patents Classification Customs tariff number	50 m/s <sup>2</sup> 100 m/s <sup>2</sup> US 6,418,546 B 85365019
Shock resistance US patents Classification Customs tariff number eCl@ss 8.0	50 m/s <sup>2</sup> 100 m/s <sup>2</sup> US 6,418,546 B 85365019 27272704
Shock resistance US patents Classification Customs tariff number eCl@ss 8.0 eCl@ss 9.0	50 m/s <sup>2</sup> 100 m/s <sup>2</sup> US 6,418,546 B 85365019 27272704 27272704

### **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 = 690 mm
- $H_{PFN}$  Nominal protective field height = 600 mm A Total height = 614 mm
- B 50 mm
- B 50 mm

C 40 mm

R Effective protective field height H<sub>PFE</sub> goes beyond the dimensions of the optics area to the outer borders of the circles labeled with R.

### **Electrical connection**

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### **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 <sup>2</sup>
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

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## **Electrical connection**

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### **Connection 2**

Type of stranding	
Thread size	M12
Туре	Female
Material	Plastic
No. of pins	8 -pin
Encoding	A-coded

### Suitable transmitters

	Part no.	Designation	Article	Description
K	68022906	MLC500T90-600MG	Safety light curtain transmitter	Resolution: 90 mm Protective field height: 600 mm Operating range: 0 20 m Connection: Cable with connector, M12, Plastic, 8 -pin, 330 mm, PUR

### Part number code

MLC	Safety light curtain
x	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
а	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
e	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
N	Note
	♦ A list with all available device types can be found on the Leuze website at www.leuze.com.

### Notes





Observe intended use!

 $\ensuremath{^{\textcircled{\tiny b}}}$  The product may only be put into operation by competent persons.

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
1111	429006	BT-2L-HG	Mounting device set	Mounting bracket, at device: Screw type Material: Metal

## Mounting technology - Swivel mounts

	Part no.	Designation	Article	Description
R. A.	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 "Safety light barriers"	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. Restrictions: Travel costs and accommodation expenses charged separately and according to expenditure.

### Accessories

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 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. Restrictions: Max. 2 h., no mechanical (mounting) and electrical (wiring) work performed, no changes (attachments, wiring, programming) to third-party components in the nearby environment.

	Note
6	No A list with all available accessories can be found on the Leuze website in the Download tab of the article detailed page.

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