## SMART SENSOR BUSINESS

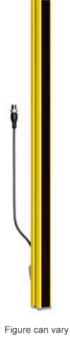
## Leuze electronic

the sensor people



Part no.: 68021909 MLC520R90-900G Safety light curtain receiver





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## Part no.: 68021909 – MLC520R90-900G – Safety light curtain receiver

#### **Technical data**

Basic data		
Series	MLC 500	
Device type	Receiver	
Cascading	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		
Resolution	90 mm	
Protective field height	900 mm	
Optical data		
Number of beams	12 Piece(s)	
Timing		
Response time	3 ms	
Connection		
Number of connections	1 Piece(s)	
Connection 1		
Type of connection	Cable with connector	
Function	Cascade, Host In Cascade, Middle Guest In	
Cable length	330 mm	
Sheathing material	PUR	
Thread size	M12	
Material	Plastic	
No. of pins	8 -pin	
Mechanical data		
Dimension (W x H x L)	29 mm x 914 mm x 53 mm	
Housing material	Metal , Aluminum	
Lens cover material	Plastic / PMMA	
Material of end caps	Diecast zinc	
Net weight	1,023 g	
Housing color	Yellow, RAL 1021	
Type of fastening	Groove mounting Mounting bracket Swivel mount	

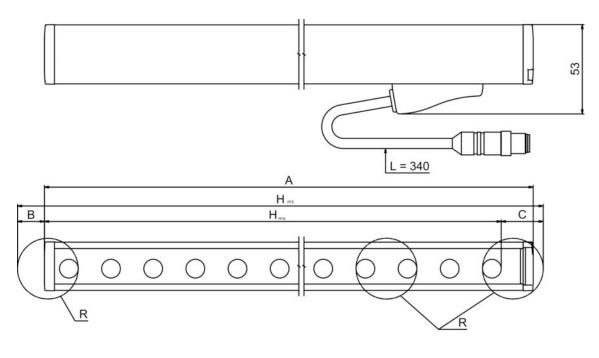
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Environmental data				
Ambient temperature, operation	0 55 °C	0 55 °C		
Ambient temperature, storage	-30 70 °C			
Relative humidity (non-condensing)	0 95 %			
Certifications				
Degree of protection	IP 65			
Protection class	III			
Certifications	c CSA US c TÜV NRTL US TÜV Süd			
Vibration resistance	50 m/s²			
Shock resistance	100 m/s²			
US patents	US 6,418,546 B	US 6,418,546 B		
Classification				
Customs tariff number	85365019			
eCl@ss 8.0	27272704			
eCl@ss 9.0	27272704			
ETIM 5.0	EC002549			
ETIM 6.0	EC002549			

#### **Dimensioned drawings**

All dimensions in millimeters

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



HPFE Effective protective field height = 990 mm HPFN Nominal protective field height = 900 mm

- A Total height = 914 mm
- B 50 mm
- C 40 mm

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R Effective protective field height HPFE goes beyond the dimensions of the optics area to the outer borders of the circles labeled with R.

#### **Electrical connection**

Connection 1			
Type of connection	Cable with connector		
Function	Cascade, Host In Cascade, Middle Guest In		
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		

#### Suitable transmitters

Part no.	Designation	Article	Description
68020909	MLC500T90-900G	transmitter	Resolution: 90 mm Protective field height: 900 mm Operating range: 0 20 m Connection: Cable with connector, M12, Plastic, 8 -pin, 330 mm, PUR

#### Part number code

Part designation: MLCxyy-za-hhhhei-ooo

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	

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MLC	Safety light curtain	
	Host/Guest (optional): H: Host MG: Middle Guest G: Guest	
	Interface (optional): /A: AS-i	
000	Option: /V: high Vibration-proof EX2: explosion protection (zones 2 + 22) SPG: Smart Process Gating	

Note
A list with all available device types can be found on the Leuze electronic website at www.leuze.com.

#### Notes

C	Observe intended use!
•	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

P	Part no.	Designation	Article	Description
		-		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

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### Mounting technology - Swivel mounts

	Part no.	Designation	Article	Description
P.o.s	429395	BT-2HF-G	Mounting bracket set	Contains: 2x BT-HF swivel mount, 2 cylinders for mounting on the light curtain 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
$\bigcirc$	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.
	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

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