



the sensor people





Figure can vary

Part no.: 68020203 MLC500T20-300G Safety light curtain transmitter











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### **Technical data**

Basic data	
Series	MLC 500
Device type	Transmitter
Cascading	Guest
Contains	2x BT-NC sliding block
Application	Hand protection
Characteristic parameters	
Туре	4 , IEC/EN 61496
SIL	3 , IEC 61508
SILCL	3 , IEC/EN 62061
Mission time T <sub>M</sub>	20 years , EN ISO 13849-1
Protective field data	
Resolution	20 mm
Protective field height	300 mm
Operating range	0 15 m
Optical data	
Number of beams	24 Piece(s)
Light source	LED , Infrared
LED light wavelength	940 nm
Transmitted-signal shape	Pulsed
LED group	Exempt group in acc. with EN 62471:2008
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 314 mm x 53 mm
Housing material	Metal , Aluminum
Lens cover material	Plastic / PMMA
Material of end caps	Diecast zinc
Net weight	423 g
Housing color	Yellow, RAL 1021
Type of feetening	Croove mounting

Groove mounting Mounting bracket Swivel mount

#### Environmental data

Type of fastening



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

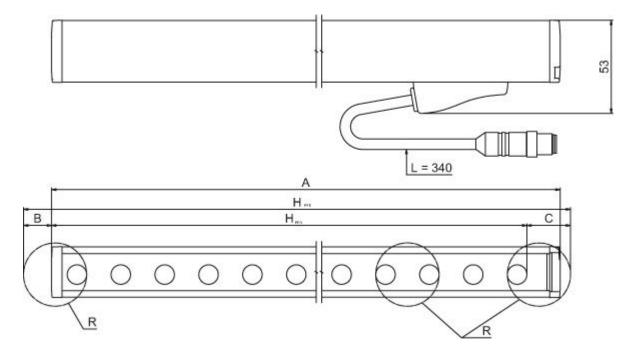
Certifications		
Degree of protection	IP 65	
Protection class	III	
Certifications	c CSA US c TÜV NRTL US TÜV Süd	
Vibration resistance	50 m/s²	
Shock resistance	100 m/s²	
US patents	US 6,418,546 B	

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<sub>PFE</sub> = H<sub>PFN</sub> + B + C



HPFE Effective protective field height = 317 mm

HPFN Nominal protective field height = 300 mm

- A Total height = 314 mm
- B 7 mm
- C 10 mm
- 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 receivers

	Part no.	Designation	Article	Description
ļ	68021203	MLC520R20-300G	curtain receiver	Resolution: 20 mm Protective field height: 300 mm Response time: 5 ms Connection: Cable with connector, M12, Plastic, 8 -pin, 330 mm, PUR

### Part number code

Part designation: MLCxyy-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
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
е	Host/Guest (optional): H: Host MG: Middle Guest G: Guest
i	Interface (optional): /A: AS-i



MLC	Safety light curtain
	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**

#### 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

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 bracket, at device: Screw type Material: Metal

## Mounting technology - Swivel mounts

	Part no.	Designation	Article	Description
Į	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

Leuze electronic GmbH + Co. KG, In der Braike 1, 73277 Owen Phone: +49 7021 573-0, Fax: +49 7021 573-199



## Alignment aids

	Part no.	Designation	Article	Description
1	520101	AC-ALM-M	Alignment aid	Housing material: Plastic

### Services

	Part no.	Designation	Article	Description
100 100 100 100 100 100 100 100 100 100	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.