



the sensor people





Figure can vary

Part no.: 68022213 MLC500T20-1350MG Safety light curtain transmitter











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Technical data

Basic data			
Series	MLC 500		
Device type	Transmitter		
	Middle Guest		
Cascading	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 _M	20 years , EN ISO 13849-1		
Donate after field date			
Protective field data	20 mm		
Resolution	20 mm		
Protective field height	1,350 mm		
Operating range	0 15 m		
Optical data			
Number of beams	108 Piece(s)		
ight source	LED , Infrared		
ED light wavelength	940 nm		
Transmitted-signal shape	Pulsed		
LED group	Exempt group in acc. with EN 62471:2008		
Connection			
Number of connections	2 Piece(s)		
Connection 1			
Type of connection	Cable with connector		
Function	Cascade, Host In		
Cable length	330 mm		
Sheathing material	PUR		
Thread size	M12		
Material	Plastic		
No. of pins	8 -pin		
Connection 2			
Type of connection	Cable with connector		
Function	Cascade, Guest Out		
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 1,364 mm x 53 mm		
	Metal , Aluminum		
Housing material	Metal , Aluminum		

Plastic / PMMA

Lens cover material



Material of end caps	Diecast zinc		
Net weight	1,548 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	50 m/s²	
Shock resistance	100 m/s²	
US patents	US 6,418,546 B	

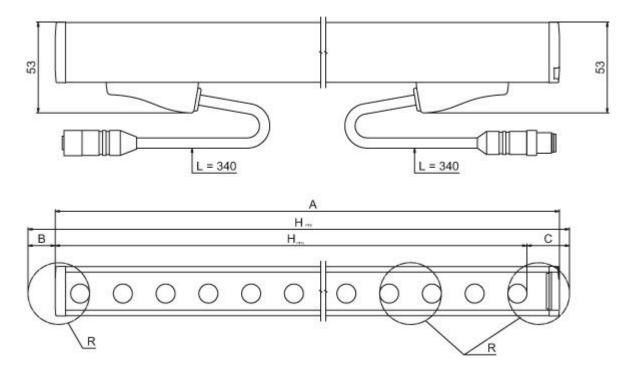
Classification	
Customs tariff number	85365019
eCl@ss 8.0	27272704
eCl@ss 9.0	27272704
ETIM 5.0	EC002549
ETIM 6.0	EC002549

Dimensioned drawings

All dimensions in millimeters



Calculation of the effective protective field height Hpfe = Hpfn + B + C



HPFE Effective protective field height = 1367 mm

HPFN Nominal protective field height = 1350 mm

A Total height = 1364 mm

 $B \hspace{0.5cm} 7 \hspace{0.5cm} mm$

C 10 mm

R 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		
Type of connection	Cable with connector	
Function	Cascade, Host In	
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	
Type of connection	Cable with connector
Function	Cascade, Guest Out
Cable length	330 mm
Sheathing material	PUR
Cable color	Black



Connection 2		
Wire cross section	0.14 mm²	
Type of stranding	Pair stranding (twisted pair)	
Thread size	M12	
Туре	Female	
Material	Plastic	
No. of pins	8 -pin	
Encoding	A-coded	

Suitable receivers

	Part no.	Designation	Article	Description
V.	68023213	MLC520R20-1350MG		Resolution: 20 mm Protective field height: 1,350 mm Response time: 23 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
000	Option: //: high Vibration-proof EX2: explosion protection (zones 2 + 22) SPG: Smart Process Gating

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N	OTE

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

Mounting technology - Swivel mounts

	Part no.	Designation	Article	Description
Page	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

Alignment aids

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

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



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.
(@	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.