



the sensor people





Figure can vary

Part no.: 68022410 MLC500T40-1050MG Safety light curtain transmitter

















# **Contents**

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



### **Technical data**

Basic data		
Series	MLC 500	
Device type	Transmitter	
Cascading	Middle Guest	
Contains	2x BT-NC sliding block	
Application	Access guarding Danger zone guarding 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	40 mm	
Protective field height	1,050 mm	
Operating range	0 20 m	
Optical data		
Number of beams	42 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	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 (M v H v I )	20 mm v 1 064 mm v 53 mm	

Dimension (W x H x L)

29 mm x 1,064 mm x 53 mm



Housing material	Metal , Aluminum		
Lens cover material	Plastic / PMMA	Plastic / PMMA	
Material of end caps	Diecast zinc		
Net weight	1,248 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	

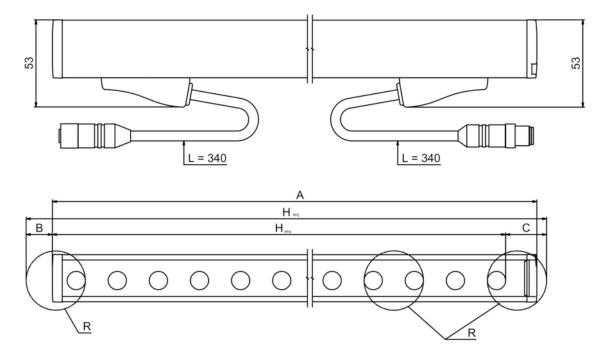
Classification	
Customs tariff number	85365019
eCl@ss 8.0	27272704
eCl@ss 9.0	27272704
ETIM 5.0	EC002549
ETIM 6.0	EC002549

### **Dimensioned drawings**

All dimensions in millimeters



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



HPFE Effective protective field height = 1090 mm HPFN Nominal protective field height = 1050 mm

A Total height = 1064 mm

B 25 mm

C 15 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**

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 mm²	
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	
Wire cross section	0.14 mm²	



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 receivers

	Part no.	Designation	Article	Description
	68023410	MLC520R40-1050MG	curtain receiver	Resolution: 40 mm Protective field height: 1,050 mm Response time: 9 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: /V: high Vibration-proof EX2: explosion protection (zones 2 + 22) SPG: Smart Process Gating

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
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

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### 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.

#### Note

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