

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

Part no.: 68022403

MLC500T40-300MG



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### **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	300 mm
Operating range	0 20 m

#### **Optical data**

Number of beams	12 Piece(s)
Light source	LED, Infrared
Wavelength	940 nm
Transmitted-signal shape	Pulsed
LED risk group	Exempt group (in acc. with EN 62471:2008)

		6247 1.2006)
С	onnection	
N	umber of connections	2 Piece(s)
	Connection 1	
	Function	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
	No. of pins	8 -pin

#### Mechanical data

29 mm x 314 mm x 53 mm
Metal
Aluminum
Plastic / PMMA
Diecast zinc
498 g
Yellow, RAL 1021
Groove mounting
Mounting brackets
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
Approvals	c TÜV NRTL US
	c UL US
	TÜV Süd
Vibration resistance	50 m/s <sup>2</sup>
Shock resistance	100 m/s <sup>2</sup>
US patents	US 6,418,546 B

#### Classification

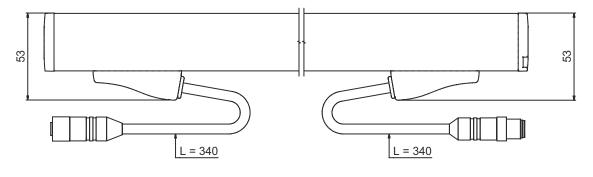
Customs tariff number	85365019
ECLASS 5.1.4	27272704
ECLASS 8.0	27272704
ECLASS 9.0	27272704
ECLASS 10.0	27272704
ECLASS 11.0	27272704
ECLASS 12.0	27272704
ECLASS 13.0	27272704
ECLASS 14.0	27272704
ECLASS 15.0	27272704
ETIM 5.0	EC002549
ETIM 6.0	EC002549
ETIM 7.0	EC002549
ETIM 8.0	EC002549
ETIM 9.0	EC002549
ETIM 10.0	EC002549

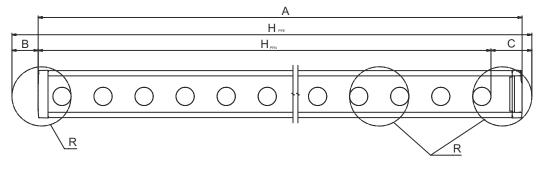
### **Dimensioned drawings**



All dimensions in millimeters

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





 $H_{\mathrm{PFE}}$  Effective protective field height = 340 mm

 ${\rm H}_{\rm PFN}$  Nominal protective field height = 300 mm

Total height = 314 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**

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 mm²
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

### **Electrical connection**



#### **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
68023403	MLC520R40-300MG	Safety light curtain receiver	Resolution: 40 mm Protective field height: 300 mm Response time: 3 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 or gating  35: Extended receiver — Gating
z	Device type T: transmitter R: receiver
a	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  SPG RR: Smart Process Gating – Reduced resolution

#### Note



 $\ ^{\mbox{\tiny $t$}}\ \mbox{A list with all available device types can be found on the Leuze website at www.leuze.com.}$ 

#### **Notes**





#### Observe intended use!



- by 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
P.C.	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

### Alignment aids

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

### **Accessories**



### Services

Part no.	Designation	Article	Description
S981050	CS40-I-140	Safety inspection	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.
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.

#### Note



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