## SMART SENSOR BUSINESS

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Part no.: 68022910 MLC500T90-1050MG Safety light curtain transmitter





Figure can vary

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## Part no.: 68022910 – MLC500T90-1050MG – Safety light curtain transmitter

#### **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		
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	90 mm		
Protective field height	1,050 mm		
Operating range	0 20 m		
Optical data			
Number of beams	14 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	330 mm PUR		
Sheathing material	PUR		
Sheathing material Thread size	PUR M12		
Sheathing material Thread size Material	PUR M12 Plastic		
Sheathing material Thread size Material No. of pins	PUR M12 Plastic		
Sheathing material Thread size Material No. of pins <b>Connection 2</b>	PUR M12 Plastic 8 -pin		
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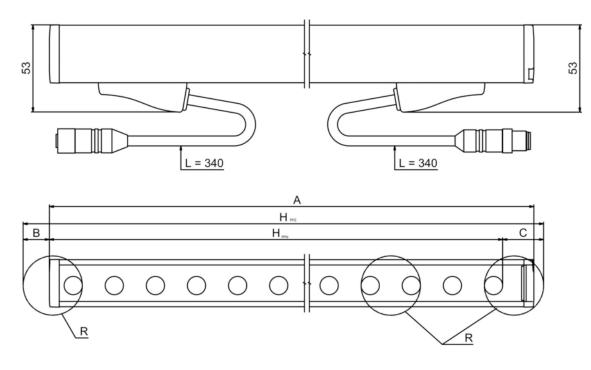
Lens cover material	Plastic / PMMA			
Material of end caps	Diecast zinc			
Net weight	1,248 g			
Housing color	Yellow, RAL 1021			
Type of fastening	Groove mounting Mounting bracket Swivel mount	Mounting bracket		
Environmental data				
Ambient temperature, operation	0 55 °C			
Ambient temperature, storage	-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

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Calculation of the effective protective field height HPFE = HPFN + B + C



HPFE Effective protective field height = 1140 mm

- HPFN Nominal protective field height = 1050 mm
- A Total height = 1064 mm
- B 50 mm
- C 40 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 mm <sup>2</sup>
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 mm <sup>2</sup>

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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
K	68023910	MLC520R90-1050MG		Resolution: 90 mm Protective field height: 1,050 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
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
e	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

Note

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

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#### 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
	CB- M12-2000E-8TP		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.G.	429395	BT-2HF-G	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
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.