SMART SENSOR BUSINESS

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Part no.: 68022304 MLC500T30-450MG Safety light curtain transmitter





Figure can vary

Contents

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

Part no.: 68022304 – MLC500T30-450MG – Safety light curtain transmitter

Technical data

Basic data			
Series	MLC 500		
Device type	Transmitter		
Cascading	Middle 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 _M	20 years , EN ISO 13849-1		
Protective field data			
Resolution	30 mm		
Protective field height	450 mm		
Operating range	0 10 m		
Optical data			
Number of beams	18 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			
Connection Number of connections	2 Piece(s)		
	2 Piece(s)		
Number of connections	2 Piece(s) Cable with connector		
Number of connections Connection 1			
Number of connections Connection 1 Type of connection	Cable with connector		
Number of connections Connection 1 Type of connection Function	Cable with connector Cascade, Host In		
Number of connections Connection 1 Type of connection Function Cable length	Cable with connector Cascade, Host In 330 mm		
Number of connections Connection 1 Type of connection Function Cable length Sheathing material	Cable with connector Cascade, Host In 330 mm PUR		
Number of connections Connection 1 Type of connection Function Cable length Sheathing material Thread size	Cable with connector Cascade, Host In 330 mm PUR M12		
Number of connections Connection 1 Type of connection Function Cable length Sheathing material Thread size Material	Cable with connector Cascade, Host In 330 mm PUR M12 Plastic		
Number of connections Connection 1 Type of connection Function Cable length Sheathing material Thread size Material No. of pins	Cable with connector Cascade, Host In 330 mm PUR M12 Plastic		
Number of connections Connection 1 Type of connection Function Cable length Sheathing material Thread size Material No. of pins Connection 2	Cable with connector Cascade, Host In 330 mm PUR M12 Plastic 8 -pin		
Number of connections Connection 1 Type of connection Function Cable length Sheathing material Thread size Material No. of pins Connection 2 Type of connection	Cable with connector Cascade, Host In 330 mm PUR M12 Plastic 8 -pin Cable with connector		
Number of connections Connection 1 Type of connection Function Cable length Sheathing material Thread size Material No. of pins Connection 2 Type of connection Function Cable length	Cable with connector Cascade, Host In 330 mm PUR M12 Plastic 8 -pin Cable with connector Cascade, Guest Out		
Number of connections Connection 1 Type of connection Function Cable length Sheathing material Thread size Material No. of pins Connection 2 Type of connection Function Cable length	Cable with connector Cascade, Host In 330 mm PUR M12 Plastic 8 -pin Cable with connector Cable with connector Cascade, Guest Out 330 mm PUR M12		
Number of connections Connection 1 Type of connection Function Cable length Sheathing material Thread size Material No. of pins Connection 2 Type of connection Function Cable length	Cable with connector Cascade, Host In 330 mm PUR M12 Plastic 8 -pin Cable with connector Cable with connector Cascade, Guest Out 330 mm PUR M12 Plastic		
Number of connections Connection 1 Type of connection Function Cable length Sheathing material Thread size Material No. of pins Connection 2 Type of connection Function Cable length Sheathing material Toype of connection Function Cable length Sheathing material Thread size	Cable with connector Cascade, Host In 330 mm PUR M12 Plastic 8 -pin Cable with connector Cable with connector Cascade, Guest Out 330 mm PUR M12		
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Number of connections Connection 1 Type of connection Function Cable length Sheathing material Thread size Material No. of pins Connection 2 Type of connection Function Cable length Sheathing material No. of pins Cable length Sheathing material Thread size Material No. of pins	Cable with connector Cascade, Host In 330 mm PUR M12 Plastic 8 -pin Cable with connector Cascade, Guest Out 330 mm PUR M12 Plastic 8 -pin		

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Part no.: 68022304 – MLC500T30-450MG – Safety light curtain transmitter

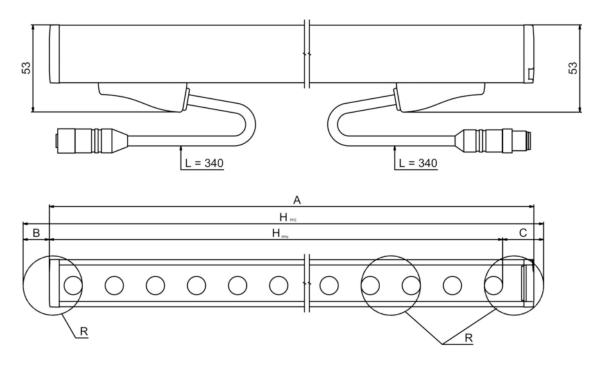
Material of end caps	Diecast zinc		
Net weight	648 g		
Housing color	Yellow, RAL 1021		
Type of fastening	Groove mounting Mounting bracket Swivel mount		
Environmental data			
Ambient temperature, operation	0 55 °C		
Ambient temperature, storage	-30 70 °C		
Relative humidity (non-condensing)	0 95 %		
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/s ²		
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

Part no.: 68022304 – MLC500T30-450MG – Safety light curtain transmitter

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



HPFE Effective protective field height = 478 mm

- HPFN Nominal protective field height = 450 mm
- A Total height = 464 mm
- B 19 mm
- C 9 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
Wire cross section	0.14 mm ²

Part no.: 68022304 – MLC500T30-450MG – Safety light curtain transmitter

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	68023304	MLC520R30-450MG		Resolution: 30 mm Protective field height: 450 mm Response time: 4 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.

Part no.: 68022304 – MLC500T30-450MG – Safety light curtain transmitter

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		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

Part no.: 68022304 – MLC500T30-450MG – Safety light curtain transmitter

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.	1