SMART SENSOR BUSINESS

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Part no.: 68022218 MLC500T20-1800MG Safety light curtain transmitter





Figure can vary

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Part no.: 68022218 – MLC500T20-1800MG – 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	20 mm
Protective field height	1,800 mm
Operating range	0 15 m
Optical data	
Number of beams	144 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 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 Cascade, Guest Out 330 mm PUR PUR M12 Plastic
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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 PUR M12 Plastic 8 -pin

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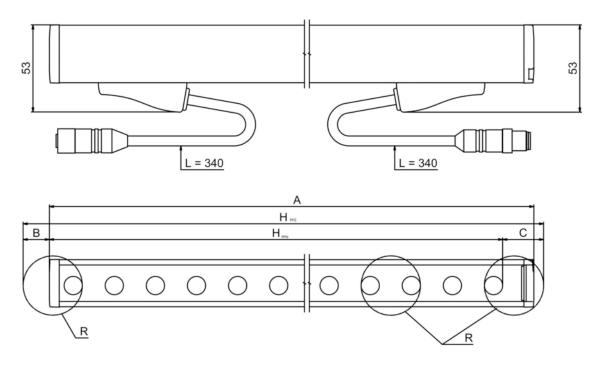
Material of end caps	Diecast zinc			
Net weight	1,998 g			
Housing color	Yellow, RAL 1021			
Type of fastening	Groove mounting Mounting bracket Swivel mount			
Environmental data				
Ambient temperature, operation	0 55 °C			
Ambient temperature, storage	-30 70 °C			
Relative humidity (non-condensing)	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

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



HPFE Effective protective field height = 1817 mm

- HPFN Nominal protective field height = 1800 mm
- A Total height = 1814 mm
- B 7 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
Wire cross section	0.14 mm ²

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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	68023218	MLC520R20-1800MG		Resolution: 20 mm Protective field height: 1,800 mm Response time: 30 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.	1