SMART SENSOR BUSINESS

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Part no.: 68023407 MLC520R40-750MG Safety light curtain receiver



Figure can vary

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Part no.: 68023407 – MLC520R40-750MG – Safety light curtain receiver

Technical data

Basic data	
Series	MLC 500
Device type	Receiver
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
Performance Level (PL)	e , EN ISO 13849-1
Mission time T_M	20 years , EN ISO 13849-1
Category	4 , EN ISO 13849
Protective field data	
Resolution	40 mm
Protective field height	750 mm
Optical data	
Number of beams	30 Piece(s)
Timing	
Response time	7 ms
Connection	
Number of connections	
	2 Piece(s)
	2 Piece(s)
Connection 1	
Connection 1 Type of connection	Cable with connector
Connection 1 Type of connection Function	Cable with connector Cascade, Host In
Connection 1 Type of connection Function Cable length	Cable with connector
Connection 1 Type of connection Function	Cable with connector Cascade, Host In 330 mm
Connection 1 Type of connection Function Cable length Sheathing material	Cable with connector Cascade, Host In 330 mm PUR
Connection 1 Type of connection Function Cable length Sheathing material Thread size	Cable with connector Cascade, Host In 330 mm PUR M12
Connection 1 Type of connection Function Cable length Sheathing material Thread size Material	Cable with connector Cascade, Host In 330 mm PUR M12 Plastic
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
Connection 1Type of connectionFunctionCable lengthSheathing materialThread sizeMaterialNo. of pinsConnection 2	Cable with connector Cascade, Host In 330 mm PUR M12 Plastic 8 -pin
Connection 1Type of connectionFunctionCable lengthSheathing materialThread sizeMaterialNo. of pinsConnection 2Type of connection	Cable with connector Cascade, Host In 330 mm PUR M12 Plastic 8 -pin Cable with connector
Connection 1Type of connectionFunctionCable lengthSheathing materialThread sizeMaterialNo. of pinsConnection 2Type of connectionFunction	Cable with connector Cascade, Host In 330 mm PUR M12 Plastic 8 -pin Cable with connector Cascade, Guest Out
Connection 1Type of connectionFunctionCable lengthSheathing materialThread sizeMaterialNo. of pinsConnection 2Type of connectionFunctionCable length	Cable with connector Cascade, Host In 330 mm PUR PUR M12 Plastic 8 -pin Cable with connector Cascade, Guest Out 330 mm
Connection 1Type of connectionFunctionCable lengthSheathing materialThread sizeMaterialNo. of pinsConnection 2Type of connectionFunctionCable lengthSheathing material	Cable with connector Cascade, Host In 330 mm PUR M12 Plastic 8 -pin Cable with connector Cascade, Guest Out 330 mm PUR
Connection 1Type of connectionFunctionCable lengthSheathing materialThread sizeMaterialNo. of pinsConnection 2Type of connectionFunctionCable lengthSheathing materialThread size	Cable with connector Cascade, Host In 330 mm PUR M12 Plastic 8 -pin Cable with connector Cascade, Guest Out 330 mm PUR PUR M12

Dimension (W x H x L) 29 mm x 764 mm x 53 mm

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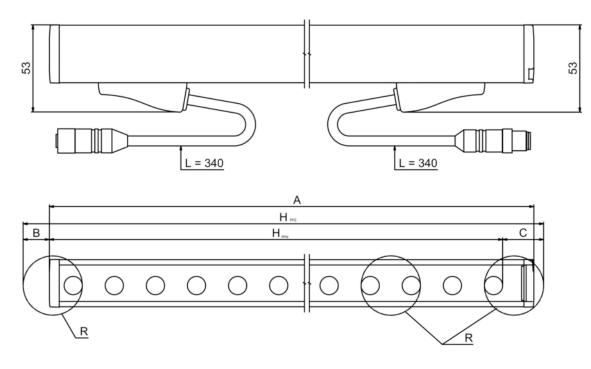
Housing material	Metal, Aluminum		
Lens cover material	Plastic / PMMA		
Material of end caps	Diecast zinc		
Net weight	948 g		
Housing color	Yellow, RAL 1021		
Type of fastening	Groove mounting Mounting bracket Swivel mount		
Environmental data			
Ambient temperature, operation	0 55 °C		
Ambient temperature, 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	c TÜV NRTL US	
Vibration resistance	50 m/s²		
Shock resistance	100 m/s²		
US patents	US 6,418,546 B	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 = 790 mm

- HPFN Nominal protective field height = 750 mm
- A Total height = 764 mm
- B 25 mm
- C 15 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 transmitters

Part no.	Designation	Article	Description
68022407		curtain	Resolution: 40 mm Protective field height: 750 mm Operating range: 0 20 m 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

Services

	Part no.	Designation	Article	Description
\bigcirc	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.

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Part no.	Designation	Article	Description
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.