## SMART SENSOR BUSINESS

## Leuze electronic

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Part no.: 68023118 MLC520R14-1800MG Safety light curtain receiver





Figure can vary

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## Part no.: 68023118 – MLC520R14-1800MG – Safety light curtain receiver

#### **Technical data**

Basic data			
Series	MLC 500		
Device type	Receiver		
Cascading	Middle Guest		
Contains	2x BT-NC sliding block		
Application	Finger protection		
Characteristic noremeters			
Characteristic parameters			
Type SIL	4 , IEC/EN 61496 3 , IEC 61508		
SILCL	3 , IEC/EN 62061		
Performance Level (PL)	e , EN ISO 13849-1		
Mission time T <sub>M</sub>	20 years , EN ISO 13849-1		
Category	4 , EN ISO 13849		
Protective field data			
Resolution	14 mm		
Protective field height	1,800 mm		
Optical data			
Number of beams	180 Piece(s)		
Timing			
Response time	38 ms		
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	PUR		
Thread size	M12		
Material	Plastic		
No. of pins	8 -pin		
Connection 2			
Type of connection	Cable with connector		
Function	Cascade, Guest Out		
Cable length	330 mm		
Sheathing material	PUR		
Thread size	M12		
Material	Plastic		
No. of pins	8 -pin		
Mechanical data			
Dimension (W x H x L)	29 mm x 1,814 mm x 53 mm		
Housing material	Metal , Aluminum		

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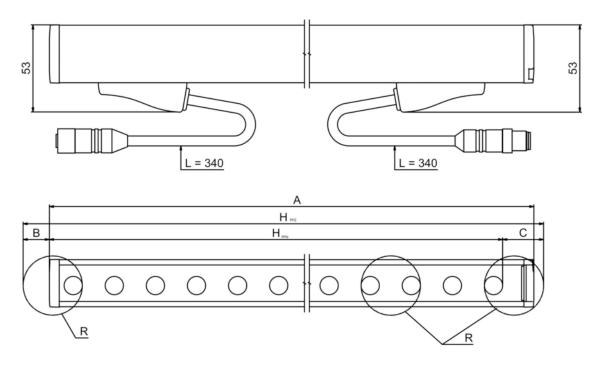
Lens cover material	Plastic / PMMA
Material of end caps	Diecast zinc
Net weight	1,998 g
Housing color	Yellow, RAL 1021
Type of fastening	Groove mounting Mounting bracket Swivel mount
Environmental data	
Ambient temperature, operation	0 55 °C
Ambient temperature, storage	-30 70 °C
Relative humidity (non-condensing)	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 = 1812 mm

- HPFN Nominal protective field height = 1800 mm
- A Total height = 1814 mm
- B 6 mm
- C 6 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 transmitters

	Part no.	Designation	Article	Description
X	68022118	MLC500T14-1800MG	curtain	Resolution: 14 mm Protective field height: 1,800 mm Operating range: 0 6 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.