# Leuze

# **Technical data sheet** Safety light curtain receiver

# Part no.: 68021218 MLC520R20-1800G



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# **Technical data**

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#### Basic data

Series	MLC 500
Device type	Receiver
Cascading	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
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**

Material

No. of pins

Resolution	20 mm			
Protective field height	1,800 mm			
Optical data				
Number of beams	144 Piece(s)			
Timing				
Response time	30 ms			
Connection				
Number of connections	1 Piece(s)			
Connection 1				
Function	Cascade, Host In			
	Cascade, Middle Guest In			
Type of connection	Cable with connector			
Cable length	330 mm			
Sheathing material	PUR			
Thread size	M12			

Plastic

8 -pin

#### Mechanical data

Dimension (W x H x L)	29 mm x 1,814 mm x 53 mm
Housing material	Metal
Metal housing	Aluminum
Lens cover material	Plastic / PMMA
Material of end caps	Diecast zinc
Net weight	1,923 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 5.1.4	27272704
eCl@ss 8.0	27272704
eCl@ss 9.0	27272704
eCl@ss 10.0	27272704
eCl@ss 11.0	27272704
ETIM 5.0	EC002549
ETIM 6.0	EC002549
ETIM 7.0	EC002549

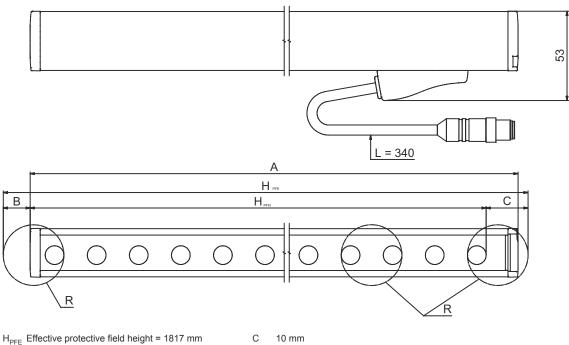
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### **Dimensioned drawings**

All dimensions in millimeters

#### Calculation of the effective protective field height $H_{PFE}$ = $H_{PFN}$ + B + C



- $H_{PFN}$  Nominal protective field height = 1800 mm Total height = 1814 mm А
- В 7 mm

Effective protective field height  ${\rm H}_{\rm PFE}$  goes beyond the dimensions of the optics area to the outer borders of the circles labeled with R.

# **Electrical connection**

#### **Connection 1**

Function	Cascade, Host In
	Cascade, Middle Guest In
Type of connection	Cable with connector
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

R

#### Suitable transmitters

 Part no.	Designation	Article	Description
68020218	MLC500T20-1800G	Safety light curtain transmitter	Resolution: 20mm Protective field height: 1,800mm Operating range: 0 15m Connection: Cable with connector, M12, Plastic, 8 -pin, 330mm, PUR

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### 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
a	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
Not	e
() × A	list with all available device types can be found on the Leuze website at www.leuze.com.

#### Notes



#### Observe intended use!

 ${\ensuremath{\,\textcircled{\tiny \ensuremath{\,\Downarrow}}}}$  The product may only be put into operation by competent persons.

 $\ensuremath{\mathfrak{b}}$  Only use the product in accordance with its intended use.

#### Accessories

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# Connection technology - Interconnection cables

	Part no.	Designation	Article	Description
	429278	CB-M12-2000E-8TP	Interconnection cable	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
R. Com	429395	BT-2HF-G	Mounting bracket set	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
	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.
С, С,	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
6	t A list with all available accessories can be found on the Leuze website in the Download tab of the article detailed page.