



Figure can vary

**Part no.: 68021315**  
**MLC520R30-1500G**  
**Safety light curtain receiver**



## Contents

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## Technical data

| <b>Basic data</b>                |   |
|----------------------------------|---|
| Series                           | MLC 500   |
| Device type                      | Receiver  |
| Cascading                        | Guest   |
| Contains                         | 2x BT-NC sliding block                              |
| Application                      | Hand protection                                     |
| <b>Characteristic parameters</b> |   |
| Type                             | 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                                    |
| <b>Protective field data</b>     |   |
| Resolution                       | 30 mm   |
| Protective field height          | 1,500 mm  |
| <b>Optical data</b>              |   |
| Number of beams                  | 60 Piece(s)   |
| <b>Timing</b>                    |   |
| Response time                    | 13 ms   |
| <b>Connection</b>                |   |
| Number of connections            | 1 Piece(s)  |
| <b>Connection 1</b>              |   |
| Type of connection               | Cable with connector                                |
| Function                         | Cascade, Host In<br>Cascade, Middle Guest In        |
| Cable length                     | 330 mm  |
| Sheathing material               | PUR   |
| Thread size                      | M12   |
| Material                         | Plastic   |
| No. of pins                      | 8 -pin  |
| <b>Mechanical data</b>           |   |
| Dimension (W x H x L)            | 29 mm x 1,514 mm x 53 mm                            |
| Housing material                 | Metal , Aluminum                                    |
| Lens cover material              | Plastic / PMMA                                      |
| Material of end caps             | Diecast zinc  |
| Net weight                       | 1,623 g   |
| Housing color                    | Yellow, RAL 1021                                    |
| Type of fastening                | Groove mounting<br>Mounting bracket<br>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<br>c TÜV NRTL US<br>TÜV Süd |
| Vibration resistance | 50 m/s <sup>2</sup>                  |
| Shock resistance     | 100 m/s <sup>2</sup>                 |
| US patents           | US 6,418,546 B                       |

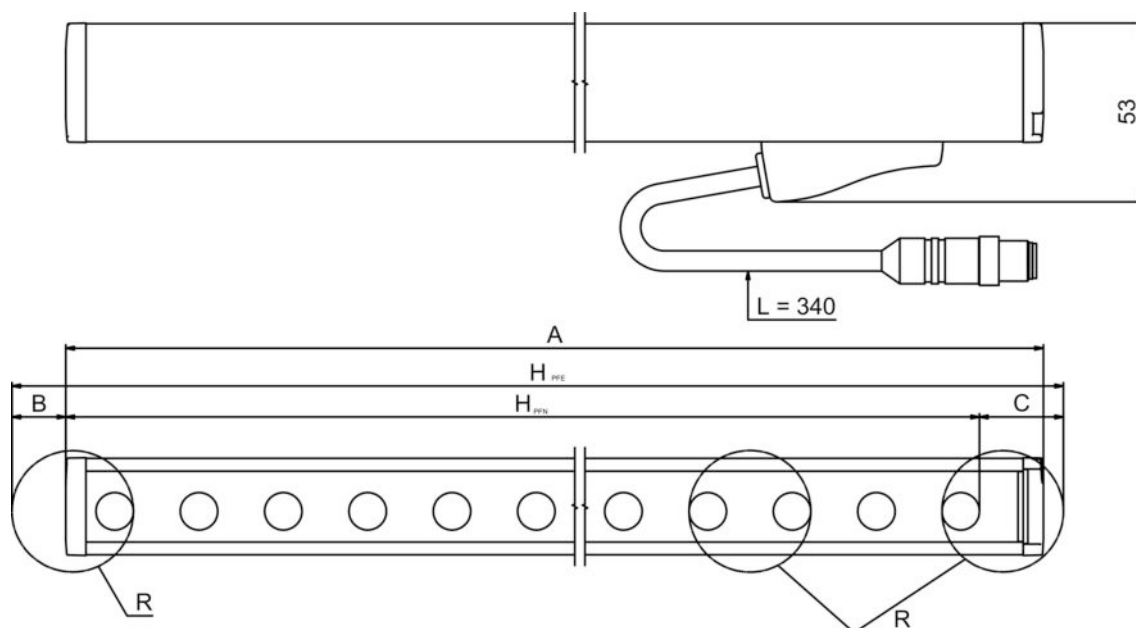
#### Classification

|                       |          |
|-----------------------|----------|
| 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

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



HPFE Effective protective field height = 1528 mm

HPFN Nominal protective field height = 1500 mm

A Total height = 1514 mm

B 19 mm

C 9 mm


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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<br>Cascade, Middle Guest 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  |
| Type               | Male   |
| Material           | Plastic                                      |
| No. of pins        | 8 -pin                                       |
| Encoding           | A-coded                                      |

### Suitable transmitters

|   | Part no. | Designation     | Article                          | Description  |
|---|----------|-----------------|----------------------------------|--|
|  | 68020315 | MLC500T30-1500G | Safety light curtain transmitter | Resolution: 30 mm<br>Protective field height: 1,500 mm<br>Operating range: 0 ... 10 m<br>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   | <b>Series:</b><br>3: MLC 300<br>5: MLC 500   |
| yy  | <b>Function classes:</b><br>00: transmitter<br>01: transmitter (AIDA)<br>02: transmitter with test input<br>10: basic receiver - automatic restart<br>11: basic receiver - automatic restart (AIDA)<br>20: standard receiver - EDM/RES selectable<br>30: extended receiver - blanking/muting |
| z   | <b>Device type:</b><br>T: transmitter<br>R: receiver   |
| a   | <b>Resolution:</b><br>14: 14 mm<br>20: 20 mm<br>30: 30 mm<br>40: 40 mm<br>90: 90 mm  |
| hhh | <b>Protective field height:</b><br>150 ... 3000: from 150 mm to 3000 mm  |

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|            |   |
|------------|---|
| <b>MLC</b> | <b>Safety light curtain</b>   |
| e          | <b>Host/Guest (optional):</b><br>H: Host<br>MG: Middle Guest<br>G: Guest  |
| i          | <b>Interface (optional):</b><br>/A: AS-i  |
| ooo        | <b>Option:</b><br>/V: high Vibration-proof<br>EX2: explosion protection (zones 2 + 22)<br>SPG: Smart Process Gating |

### Note

A list with all available device types can be found on the Leuze electronic website at [www.leuze.com](http://www.leuze.com).

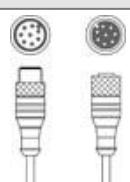
## Notes

### 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 | Interconnection cable | Connection 1: Connector, M12, Axial, Female, A-coded, 8 -pin<br>Connection 2: Connector, M12, Axial, Male, A-coded, 8 -pin<br>Shielded: Yes<br>Cable length: 2,000 mm<br>Sheathing material: PUR |

### Mounting technology - Mounting brackets



|   | Part no. | Designation | Article             | Description  |
|---|----------|-------------|---------------------|--|
|  | 429006   | BT-2L-HG    | Mounting device set | Mounting bracket, at device: Screw type<br>Material: Metal |

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## Mounting technology - Swivel mounts

|   | Part no. | Designation | Article              | Description   |
|---|----------|-------------|----------------------|---|
|  | 429395   | BT-2HF-G    | Mounting bracket set | Contains: 2x BT-HF swivel mount, 2 cylinders for mounting on the light curtain<br>Fastening, at system: Through-hole mounting<br>Mounting bracket, at device: Clampable<br>Type of mounting device: Turning, 360°<br>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.<br>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.<br>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.<br>Conditions: Devices and connection cables are already mounted, price not including travel costs and, if applicable, accommodation expenses.<br>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.