



Figure can vary

Part no.: 68023906
MLC520R90-600MG
Safety light curtain receiver



Contents

- Technical data
- Suitable transmitters
- Dimensioned drawings
- Electrical connection
- Part number code
- Accessories
- Notes

Technical data

| Basic data | |
|----------------------------------|---|
| Series | MLC 500 |
| Device type | Receiver |
| Cascading | Middle Guest |
| Contains | 2x BT-NC sliding block |
| Application | Danger zone guarding Access guarding |
| Characteristic parameters | |
| 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 |
| Protective field data | |
| Resolution | 90 mm |
| Protective field height | 600 mm |
| Optical data | |
| Number of beams | 8 Piece(s) |
| Timing | |
| Response time | 2 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 614 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 | 798 g |
| Housing color | Yellow, RAL 1021 |
| Type of fastening | Groove mounting Swivel mount Mounting bracket |

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 TÜV NRTL US TÜV Süd c CSA US |
| Vibration resistance | 50 m/s ² |
| Shock resistance | 100 m/s ² |
| US patents | US 6,418,546 B |

Classification

| | |
|------------|----------|
| eCl@ss 8.0 | 27272704 |
| eCl@ss 9.0 | 27272704 |
| ETIM 5.0 | EC002549 |

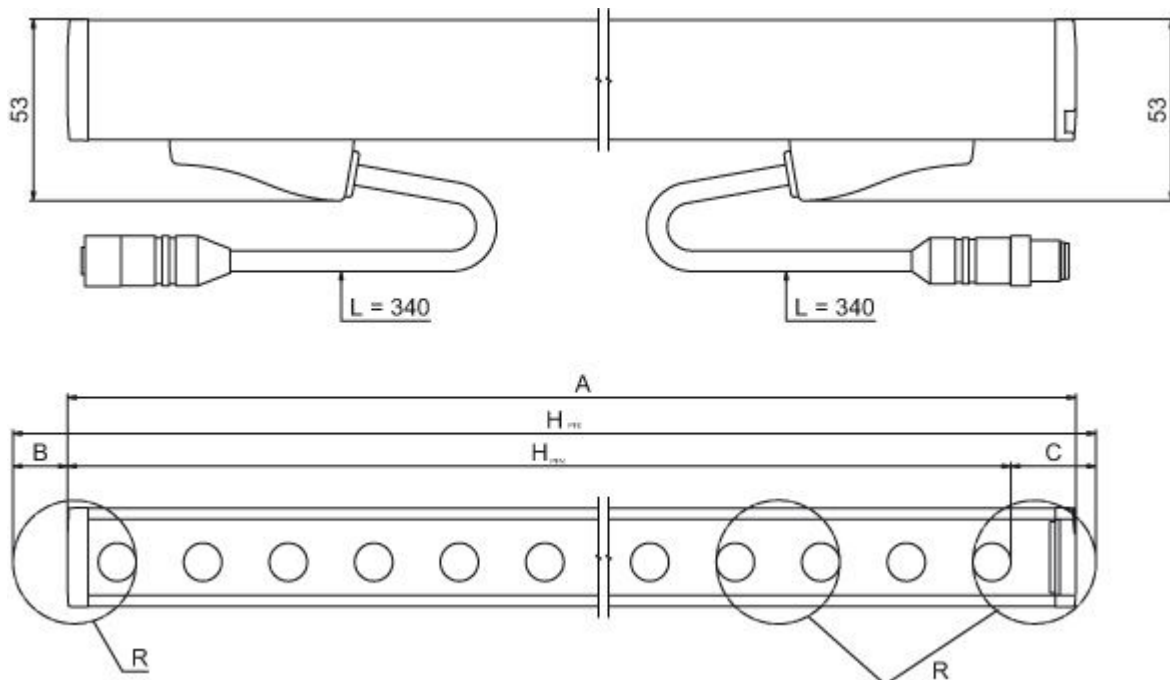
Suitable transmitters

| | Part no. | Designation | Article | Description |
|---|----------|-----------------|----------------------------------|--|
|  | 68022906 | MLC500T90-600MG | Safety light curtain transmitter | Resolution: 90 mm Protective field height: 600 mm Operating range: 0 ... 20 m Connection: Cable with connector, M12, Plastic, 8 -pin, 330 mm, PUR |

Dimensioned drawings

All dimensions in millimeters

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



| | |
|------|---|
| HPFE | Effective protective field height = 690 mm |
| HPFN | Nominal protective field height = 600 mm |
| A | Total height = 614 mm |
| B | 50 mm |
| C | 40 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 |
| Type | 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 |

Part no.: 68023906 – MLC520R90-600MG – Safety light curtain receiver

| Connection 2 | |
|--------------------|-------------------------------|
| Cable color | Black |
| Wire cross section | 0.14 mm ² |
| Type of stranding | Pair stranding (twisted pair) |
| Thread size | M12 |
| Type | Female |
| Material | Plastic |
| No. of pins | 8 -pin |
| Encoding | A-coded |

Part number code

Part designation: **MLCxyy-za-hhhhei-ooo**

| MLC | Safety light curtain |
|-----|--|
| x | Series: 3: MLC 300 5: MLC 500 |
| yy | 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 |
| hhh | 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 |
| ooo | 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.

Accessories

Mounting technology - Mounting brackets

| | Part no. | Designation | Article | Description |
|---|----------|-------------|----------------------|---|
|  | 429056 | BT-2L | Mounting bracket set | Design of mounting device: Angle, L-shape Mounting bracket, at system: Through-hole mounting Mounting bracket, at device: Screw type Material: Metal |
|  | 429006 | BT-2L-HG | Mounting device set | Mounting bracket, at device: Screw type Material: Metal |
|  | 429057 | BT-2Z | Mounting bracket set | Design of mounting device: Angle, Z-shape Mounting bracket, at system: Through-hole mounting Mounting bracket, at device: Screw type Material: Metal |
|  | 429005 | BT-L-HG | Mounting device set | Mounting bracket, at device: Screw type Material: Metal |





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 Mounting bracket, at system: Through-hole mounting Mounting bracket, at device: Clampable Type of mounting device: Turning, 360° Material: Metal, Plastic |
|  | 429396 | BT-2HF-GS | Mounting bracket set | Contains: 2x BT-HF swivel mount, 2 cylinders for mounting on the light curtain Mounting bracket, at system: Through-hole mounting Mounting bracket, at device: Clampable Type of mounting device: Turning, 360° Material: Metal, Plastic Shock absorber: Yes |
|  | 429029 | BT-2RG | Mounting bracket set | Contains: 2x BT-R swivel mount, 2 cylinders for mounting on the light curtain Mounting bracket, at system: Through-hole mounting Mounting bracket, at device: Clampable Type of mounting device: Turning, 360° Material: Metal, Plastic |




Mounting technology - Other

| | Part no. | Designation | Article | Description |
|---|----------|-------------|-------------------|--|
|  | 425740 | BT-10NC60 | Sliding block set | Contains: 10x BT-NC sliding block Bore hole 1: Ø 4.7 mm Bore hole 2: M6 Design of mounting device: Sliding block Mounting bracket, at system: Mounting thread Mounting bracket, at device: Groove mounting Material: Metal |



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| | Part no. | Designation | Article | Description |
|---|----------|-------------|----------------------|---|
|  | 425741 | BT-10NC64 | Sliding block set | Contains: 10x BT-NC-M4-M6 sliding block Bore hole 1: M4 Bore hole 2: M6 Design of mounting device: Sliding block Mounting bracket, at system: Mounting thread Mounting bracket, at device: Groove mounting Material: Metal |
|  | 425742 | BT-10NC65 | Sliding block set | Contains: 10x BT-NC-M5-M6 sliding block Bore hole 1: M5 Bore hole 2: M6 Design of mounting device: Sliding block Mounting bracket, at system: Mounting thread Mounting bracket, at device: Groove mounting Material: Metal |
|  | 424422 | BT-2SB10 | Mounting bracket set | Contains: 2x BT-SB10 Design of mounting device: Mounting clamp Mounting bracket, at system: Through-hole mounting Mounting bracket, at device: Clampable, an der seitlichen C-Nut Type of mounting device: Swiveling Swivel range: -8 ... 8 ° Material: Metal |
|  | 424423 | BT-2SB10-S | Mounting bracket set | Contains: 2x BT-SB10-S Design of mounting device: Mounting clamp Mounting bracket, at system: Through-hole mounting Mounting bracket, at device: Clampable, an der seitlichen C-Nut Swivel range: -8 ... 8 ° Material: Metal Shock absorber: Yes |

Alignment aids

| | Part no. | Designation | Article | Description |
|---|----------|-------------|---------------|---|
|  | 427300 | AC-ALM | Alignment aid | Housing material: Plastic |
|  | 520101 | AC-ALM-M | Alignment aid | Housing material: Plastic |
|  | 560020 | LA-78U | Alignment aid | Light source: laser, Red Housing material: Metal |

Protective screens

| | Part no. | Designation | Article | Description |
|---|----------|-------------|----------------------|---|
|  | 429038 | MLC-2PSF | Mounting bracket set | Type of fastening: Clampable Mounting device material: Metal |
|  | 347074 | MLC-PS600 | Protective screen | Protective field height: 600 mm Material: PMMA, clear |

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.