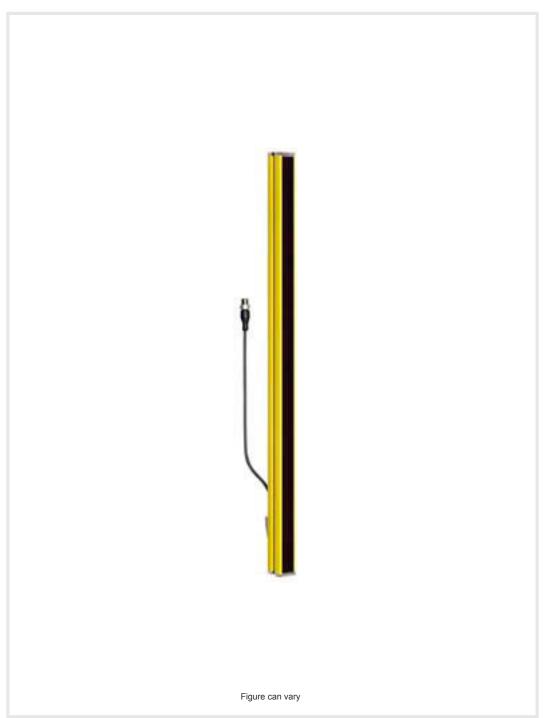


Technical data sheet Safety light curtain receiver

Part no.: 68021403

MLC520R40-300G



Contents

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

















Technical data



Basic data

| Series | MLC 500 |
|-------------|------------------------|
| Device type | Receiver |
| Cascading | 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 $T_{\rm M}$ | 20 years, EN ISO 13849-1 |
| Category | 4, EN ISO 13849 |
| | |

Protective field data

| Resolution | 40 mm |
|-------------------------|--------|
| Protective field height | 300 mm |

Optical data

| Number of beams | 12 Piece(s) |
|-----------------|-------------|
| Timing | |

3 ms

1 Piece(s)

Response time Connection

No. of pins

Number of connections

| 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 |
| Material | Plastic |

8 -pin

Mechanical data

| Dimension (W x H x L) | 29 mm x 314 mm x 53 mm |
|-----------------------|------------------------|
| Housing material | Metal |
| Metal housing | Aluminum |
| Lens cover material | Plastic / PMMA |
| Material of end caps | Diecast zinc |
| Net weight | 423 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 |
| Polative humidity (non-condensing) | 0 05 % |

Certifications

| Degree of protection | IP 65 |
|----------------------|---------------------|
| Protection class | III |
| Certifications | c CSA US |
| | c TÜV NRTL US |
| | TÜV Süd |
| Vibration resistance | 50 m/s ² |
| Shock resistance | 100 m/s² |
| US patents | US 6,418,546 B |

Classification

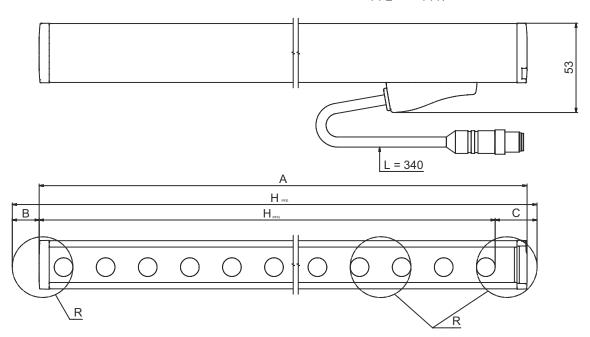
| Customs tariff number | 85365019 |
|-----------------------|----------|
| eCl@ss 5.1.4 | 27272704 |
| eCl@ss 8.0 | 27272704 |
| eCl@ss 9.0 | 27272704 |
| eCl@ss 10.0 | 27272704 |
| eCl@ss 11.0 | 27272704 |
| ETIM 5.0 | EC002549 |
| ETIM 6.0 | EC002549 |
| ETIM 7.0 | EC002549 |

Dimensioned drawings



All dimensions in millimeters

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



 H_{PFE} Effective protective field height = 340 mm

 H_{PFN} Nominal protective field height = 300 mm

Total height = 314 mm

25 mm

- С 15 mm
- 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

| 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 mm² |
| Thread size | M12 |
| Туре | Male |
| Material | Plastic |
| No. of pins | 8 -pin |
| Encoding | A-coded |
| | |

Suitable transmitters

| Part no. | Designation | Article | Description |
|----------|----------------|-------------------------------------|---|
| 68020403 | MLC500T40-300G | Safety light curtain transmitter | Resolution: 40 mm Protective field height: 300 mm Operating range: 0 20 m Connection: Cable with connector, M12, Plastic, 8 -pin, 330 mm, PUR |

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Part number code



Part designation: MLCxyy-za-hhhhei-ooo

| MLC | Safety light curtain |
|------|--|
| х | 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 |
| е | 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



Notes



Observe intended use!



♥ Only use the product in accordance with its intended use.

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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 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 |
|---------|----------|-------------|---------------------|--|
| 1111111 | 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.C. | 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. |
| 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

