

# Technical data sheet Safety light curtain receiver

Part no.: 68023306

MLC520R30-600MG



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## **Technical data**



#### Basic data

| MLC 500                |
|------------------------|
| Receiver               |
| Middle Guest           |
| 2x BT-NC sliding block |
| 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

| Resolution              | 30 mm  |
|-------------------------|--------|
| Protective field height | 600 mm |

#### **Optical data**

#### **Timing**

| Response time | 5 ms |
|---------------|------|
|               |      |

#### Connection

| Number of connections | 2 Piece(s) |
|-----------------------|------------|
|-----------------------|------------|

| Cascade, Host In     |
|----------------------|
| Cable with connector |
| 330 mm               |
| PUR                  |
| M12                  |
| Plastic              |
| 8 -pin               |
|                      |

#### Connection 2

| Function           | Cascade, Guest Out   |
|--------------------|----------------------|
| Type of connection | Cable with connector |
| Cable length       | 330 mm               |
| Sheathing material | PUR                  |
| Thread size        | M12                  |
| Material           | Plastic              |
| No. of pins        | 8 -pin               |

#### Mechanical data

| 29 mm x 614 mm x 53 mm |
|------------------------|
| Metal                  |
| Aluminum               |
| Plastic / PMMA         |
| Diecast zinc           |
| 798 g                  |
| Yellow, RAL 1021       |
| 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/s <sup>2</sup> |
| US patents           | US 6.418.546 B       |

#### Classification

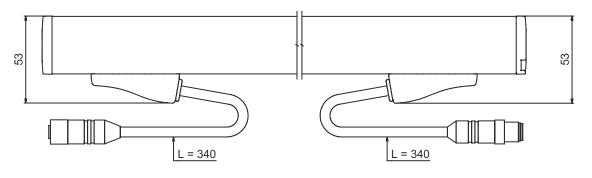
| Customs tariff number | 85365019 |
|-----------------------|----------|
| eCl@ss 5.1.4          | 27272704 |
| eCl@ss 8.0            | 27272704 |
| eCl@ss 9.0            | 27272704 |
| eCl@ss 10.0           | 27272704 |
| eCl@ss 11.0           | 27272704 |
| ETIM 5.0              | EC002549 |
| ETIM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

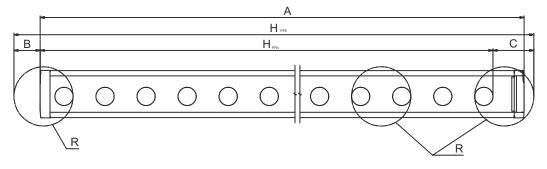
# **Dimensioned drawings**



All dimensions in millimeters

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





 $H_{\mathrm{PFE}}$  Effective protective field height = 628 mm

H<sub>PFN</sub> Nominal protective field height = 600 mm

Total height = 614 mm

19 mm

- С
- Effective protective field height  $H_{\text{PFE}}$  goes beyond the dimensions of the optics area to the outer borders of the circles labeled with R.

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# **Electrical connection**

#### **Connection 1**

| Function           | Cascade, Host 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                       |

#### **Connection 2**

| Function           | Cascade, Guest Out   |
|--------------------|----------------------|
| Type of connection | Cable with connector |
| Cable length       | 330 mm               |
| Sheathing material | PUR                  |
| Cable color        | Black                |
| Wire cross section | 0.14 mm²             |

## **Electrical connection**



#### **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                                                                                                                                   |
|----------|-----------------|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| 68022306 | MLC500T30-600MG | Safety light curtain transmitter | Resolution: 30 mm Protective field height: 600 mm Operating range: 0 10 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                                                                                                                                                                                                                                             |
|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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)<br>/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 website at www.leuze.com.

#### **Notes**





#### Observe intended use!



- % 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                                                |
|------|----------|-------------|---------------------|------------------------------------------------------------|
| 1111 | 429006   | BT-2L-HG    | Mounting device set | Mounting bracket, at device: Screw type<br>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<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<br>"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. |

### **Accessories**



| 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 website in the Download tab of the article detailed page.