

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

Part no.: 68021318

MLC520R30-1800G



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# **Technical data**



#### Basic data

| Series      | MLC 500                |
|-------------|------------------------|
| Device type | Receiver               |
| Cascading   | Guest                  |
| Contains    | 2x BT-NC sliding block |
| Application | Hand protection        |

### **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 <sub>M</sub> | 20 years, EN ISO 13849-1 |
| Category                    | 4, EN ISO 13849          |
|                             |                          |

#### Protective field data

| Resolution              | 30 mm    |
|-------------------------|----------|
| Protective field height | 1,800 mm |

#### **Optical data**

| Number of beams | 72 Piece(s) |
|-----------------|-------------|
|                 |             |

#### **Time behavior**

| Response time | 15 ms, plus response times of the Host |
|---------------|--|
|               | Middle Guest devices                   |

#### Connection

| 1 Piece(s) |
|------------|
| 1 Piece(   |

| 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                  |
| No. of pins        | 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 brackets        |
|                       | 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                  |
| Approvals            | c TÜV NRTL US        |
|                      | c UL US              |
|                      | 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

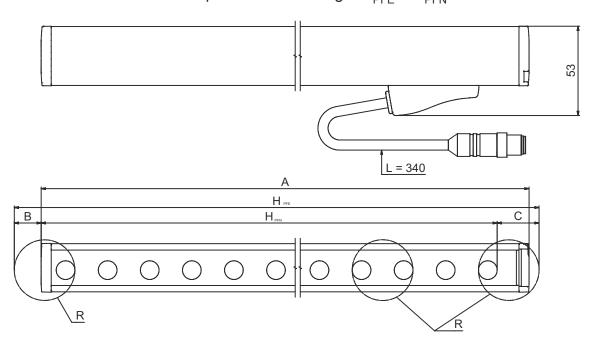
| Customs tariff number | 85365019 |
|-----------------------|----------|
| ECLASS 5.1.4          | 27272704 |
| ECLASS 8.0            | 27272704 |
| ECLASS 9.0            | 27272704 |
| ECLASS 10.0           | 27272704 |
| ECLASS 11.0           | 27272704 |
| ECLASS 12.0           | 27272704 |
| ECLASS 13.0           | 27272704 |
| ECLASS 14.0           | 27272704 |
| ECLASS 15.0           | 27272704 |
| ETIM 5.0              | EC002549 |
| ETIM 6.0              | EC002549 |
| ETIM 7.0              | EC002549 |
| ETIM 8.0              | EC002549 |
| ETIM 9.0              | EC002549 |
| ETIM 10.0             | EC002549 |
|                       |          |

# **Dimensioned drawings**



All dimensions in millimeters

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



 $H_{\mathsf{PFE}}$  Effective protective field height = 1828 mm

 $H_{PFN}$  Nominal protective field height = 1800 mm

Total height = 1814 mm

19 mm

- С 9 mm
- Effective protective field height H<sub>PFE</sub> 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                       |

# Suitable transmitters

| Part no. | Designation     | Article                          | Description   |
|----------|-----------------|----------------------------------|---|
| 68020318 | MLC500T30-1800G | Safety light curtain transmitter | Resolution: 30 mm Protective field height: 1,800 mm Operating range: 0 10 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 or gating 35: Extended receiver — Gating |
| z    | Device type T: transmitter R: receiver  |
| а    | 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  //: high Vibration-proof  EX2: explosion protection (zones 2 + 22)  SPG: Smart Process Gating  SPG RR: Smart Process Gating – Reduced resolution  |

# Note



🖔 A list with all available device types can be found on the Leuze website at www.leuze.com.

# **Notes**



### Observe 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<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  |
|----------|-------------|-------------------|--|
| \$981050 | CS40-I-140  | Safety inspection | 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. |
| 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.   |

# Note



🔖 A list with all available accessories can be found on the Leuze website in the Download tab of the article detailed page.