

Technical data sheet

Safety sensor set

Part no.: 68052312

MLC100-30-1200

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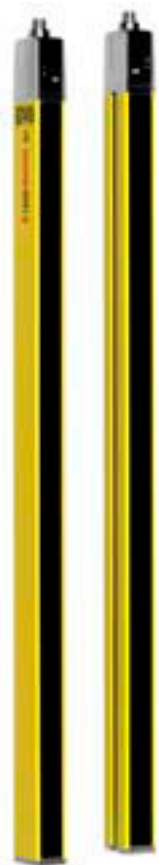


Figure can vary

Technical data

Basic data

| | |
|-------------|--------------------------------|
| Series | MLC 100 |
| Device type | Set (transmitter and receiver) |
| Application | Hand protection |

Functions

| | |
|-----------|---------------------------------|
| Functions | Automatic start/restart |
| | Range reduction |
| | Transmission channel changeover |

Characteristic parameters

| | |
|-----------------------------|--------------------------|
| Type | 4, IEC/EN 61496 |
| SIL | 3, IEC 61508 |
| SILCL | 3, IEC/EN 62061 |
| Performance Level (PL) | e, EN ISO 13849-1 |
| PFH _D | 7.73E-09 per hour |
| Mission time T _M | 20 years, EN ISO 13849-1 |
| Category | 4, EN ISO 13849 |

Protective field data

| | |
|-------------------------|-----------|
| Resolution | 30 mm |
| Protective field height | 1,200 mm |
| Operating range | 0 ... 6 m |

Optical data

| | |
|---------------------------------|--|
| Synchronization | Optical between transmitter and receiver |
| Light source | LED, Infrared |
| LED light wavelength | 940 nm |
| Mean power of transmitter diode | 50 µW |
| Transmitted-signal shape | Pulsed |
| LED group | 1 |

Electrical data

| | |
|--------------------|-------------------------|
| Protective circuit | Overvoltage protection |
| | Short circuit protected |

Performance data

| | |
|-------------------------------|------------------------|
| Supply voltage U _B | 24 V, DC, -20 ... 20 % |
| Fuse | 2 A semi time-lag |

Inputs

| | |
|------------------------------------|------------|
| Number of digital switching inputs | 1 Piece(s) |
|------------------------------------|------------|

Switching inputs

| | |
|------------------------------|-------------------------|
| Type | Digital switching input |
| Switching voltage high, min. | 18 V |
| Switching voltage low, max. | 2.5 V |
| Switching voltage, typ. | 22.5 V |
| Voltage type | DC |

Digital switching input 1

| | |
|----------|-------------------------------|
| Function | Control input range reduction |
|----------|-------------------------------|

Outputs

| | |
|--|------------|
| Number of safety-related switching outputs (OSSDs) | 2 Piece(s) |
|--|------------|

Safety-related switching outputs

| | |
|------------------------------|--------------------------------------|
| Type | Safety-related switching output OSSD |
| Switching voltage high, min. | 18 V |
| Switching voltage low, max. | 2.5 V |
| Switching voltage, typ. | 22.5 V |
| Voltage type | DC |
| Current load, max. | 380 mA |
| Load inductivity | 2,000 µH |
| Load capacity | 0.3 µF |
| Residual current, max. | 0.2 mA |
| Residual current, typ. | 0.002 mA |
| Voltage drop | 1.5 V |

Safety-related switching output 1

| | |
|-------------------|-----------------|
| Switching element | Transistor, PNP |
|-------------------|-----------------|

Safety-related switching output 2

| | |
|-------------------|-----------------|
| Switching element | Transistor, PNP |
|-------------------|-----------------|

Timing

| | |
|--------------------|--------|
| Response time | 12 ms |
| Restart delay time | 100 ms |

Connection

| | |
|-----------------------|------------|
| Number of connections | 1 Piece(s) |
|-----------------------|------------|

Connection 1

| | |
|--------------------|-----------------|
| Function | Local interface |
| Type of connection | Connector |
| Thread size | M12 |
| Material | Metal |
| No. of pins | 5 -pin |

Cable properties

| | |
|--|----------------------|
| Permissible conductor cross section, typ. | 0.25 mm ² |
| Length of connection cable, max. | 100 m |
| Permissible cable resistance to load, max. | 200 Ω |

Mechanical data

| | |
|-----------------------|----------------------------|
| Dimension (W x H x L) | 29 mm x 1,266 mm x 35.4 mm |
| Housing material | Metal, Aluminum |
| Lens cover material | Plastic / PMMA |
| Material of end caps | Diecast zinc |
| Net weight | 1,350 g |
| Housing color | Yellow, RAL 1021 |
| Type of fastening | Groove mounting |
| | Mounting bracket |
| | Mounting on Device Column |
| | Swivel mount |

Environmental data

| | |
|------------------------------------|---------------|
| Ambient temperature, operation | 0 ... 55 °C |
| Ambient temperature, storage | -25 ... 70 °C |
| Relative humidity (non-condensing) | 0 ... 95 % |

Technical data

Certifications

| | |
|----------------------|----------------|
| Degree of protection | IP 65 |
| Protection class | III |
| Certifications | c CSA US |
| | c TÜV NRTL US |
| | TÜV Süd |
| 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 |


Electrical connection

Connection 1


| | |
|--------------------|-----------------|
| Function | Local interface |
| Type of connection | Connector |
| Thread size | M12 |
| Type | Male |
| Material | Metal |
| No. of pins | 5 -pin |
| Encoding | A-coded |

Accessories


Connection technology - Connection cables

| | Part no. | Designation | Article | Description |
|--|----------|--------------------|------------------|--|
|  | 50133860 | KD S-M12-5A-P1-050 | Connection cable | Connection 1: Connector, M12, Axial, Female, A-coded, 5 -pin Connection 2: Open end Shielded: Yes Cable length: 5,000 mm Sheathing material: PUR |

Mounting technology - Swivel mounts

| | Part no. | Designation | Article | Description |
|--|----------|-------------|----------------------|---|
|  | 429393 | BT-2HF | Mounting bracket set | Fastening, at system: Through-hole mounting Mounting bracket, at device: Clampable Type of mounting device: Turning, 360° Material: Metal, Plastic |

Alignment aids

| | Part no. | Designation | Article | Description |
|--|----------|-------------|---------------|---------------------------|
|  | 520101 | AC-ALM-M | Alignment aid | Housing material: Plastic |

Accessories

Note



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