



the sensor people





CML720i-T20-2530.A-M12-EX Light curtain transmitter





Part no.: 50126417

Figure can vary

Contents

- Technical data
- . Dimensioned drawings
- Electrical connection
- · Operation and display
- Suitable receivers
- · Part number code
- Notes
- Accessories



Technical data

| Basic data | |
|-------------------------------|---|
| Series | 720 |
| Operating principle | Throughbeam principle |
| | Transmitter |
| Device type | |
| Contains | 2x BT-NC sliding block |
| Application | Object measurement |
| Special design | |
| Special design | Crossed-beam scanning Diagonal-beam scanning Ex-protected Parallel-beam scanning |
| Ontical data | |
| Optical data | Guaranteed operating range |
| Operating range | Guaranteed operating range 0.3 7 m |
| Operating range | |
| Operating range limit | Typical operating range |
| Operating range limit | 0.2 9 m |
| Measurement field length | 2,530 mm |
| Number of beams | 127 Piece(s) |
| Beam spacing | 20 mm |
| Light source | LED , Infrared |
| LED light wavelength | 940 nm |
| Measurement data | |
| Minimum object diameter | 30 mm |
| | |
| Electrical data | |
| Protective circuit | Polarity reversal protection Short circuit protected Transient protection |
| Performance data | |
| Supply voltage U _B | 18 30 V , DC |
| Residual ripple | 0 15 % , From U _B |
| Open-circuit current | 0 435 mA , The specified values refer to the entire package consisting of transmitter and receiver. |
| Timing | |
| Readiness delay | 450 ms |
| Cycle time | 4.24 ms |
| | |
| Connection | 48: (1) |
| Number of connections | 1 Piece(s) |
| Plug outlet | Axial |



| Connection 1 | | |
|--------------------------------|--|--|
| Type of connection | Connector | |
| Function | Connection to receiver Sync-input Voltage supply | |
| Thread size | M12 | |
| Туре | Male | |
| Material | Metal | |
| No. of pins | 5 -pin | |
| Encoding | A-coded | |
| Mechanical data | | |
| Design | Cubic | |
| Dimension (W x H x L) | 30.7 mm x 40.3 mm x 2,583 mm | |
| Housing material | Metal , Aluminum | |
| Lens cover material | Plastic | |
| Housing color | Silver | |
| Type of fastening | Groove mounting Via optional mounting device | |
| Operation and display | | |
| Type of display | LED | |
| Number of LEDs | 1 Piece(s) | |
| Environmental data | | |
| Ambient temperature, operation | -30 60 °C | |
| Ambient temperature, storage | -40 70 °C | |

| Ex specification | | |
|------------------|---|--|
| Ex-zone | 2 | |

| Certifications | | |
|----------------------|---------------|--|
| Degree of protection | IP 65 | |
| Protection class | III | |
| Standards applied | IEC 60947-5-2 | |

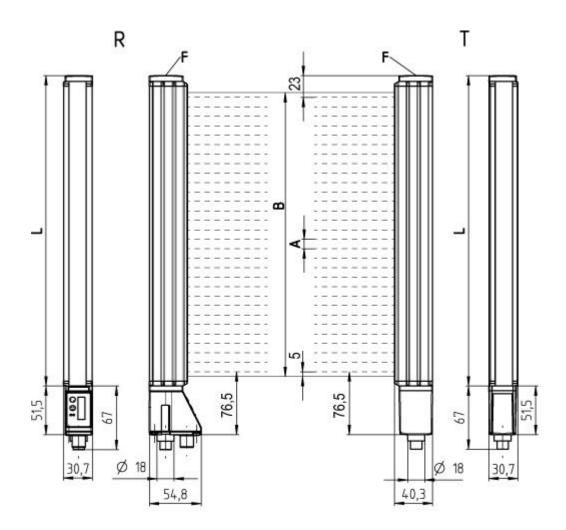
| Classification | |
|-----------------------|----------|
| Customs tariff number | 90314990 |
| eCl@ss 8.0 | 27270910 |
| eCl@ss 9.0 | 27270910 |
| ETIM 5.0 | EC002549 |
| ETIM 6.0 | EC002549 |

Dimensioned drawings

All dimensions in millimeters

Ex device group

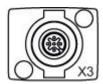








- A Beam spacing 20 mm
- B Measurement field length 2530 mm
- F M6 thread
- G Fastening groove
- L Profile length 2568 mm
- T Transmitter
- R Receiver



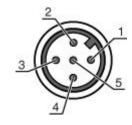
A PWR / SW IN/OUT B BUS IN / OUT



Electrical connection

| Connection 1 | |
|--------------------|--|
| Type of connection | Connector |
| Function | Connection to receiver Sync-input Voltage supply |
| Thread size | M12 |
| Туре | Male |
| Material | Metal |
| No. of pins | 5 -pin |
| Encoding | A-coded |

| Pin | Pin assignment |
|-----|----------------|
| 1 | FE/SHIELD |
| 2 | V+ |
| 3 | GND |
| 4 | RS 485 Tx+ |
| 5 | RS 485 Tx- |



Operation and display

LEDs

| | LED | Display | Meaning |
|---|-----|--|--|
| | 1 | Green, continuous light | Continuous mode |
| 1 | | Off | No communication with the receiver / waiting for trigger |
| | | green, flashing in sync with the measurement | Measurement frequency display |

Suitable receivers

| Part no. | Designation | Article | Description |
|----------|--------------------------------------|---------------------------|--|
| 50126386 | CML720i- R20-2530.A/CN- M12-EX | Light curtain receiver | Operating range: 0.3 7 m Interface: CANopen, IO-Link Connection: Connector, M12, Axial, 8 -pin |

Part number code

Part designation: CML7XXi-YZZ-AAAA.BCCCDDD-EEEFFF

| CML | Operating principle: Measuring light curtain |
|------|--|
| 7XXi | Series: 720i: 720i series 730i: 730i series |

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| Υ | Device type: T: transmitter R: receiver | |
|------|---|--|
| ZZ | Beam spacing: 05: 5 mm 10: 10 mm 20: 20 mm 40: 40 mm | |
| AAAA | Measurement field length [mm], dependent on beam spacing | |
| В | Equipment: A: connector outlet, axial R: rear connector outlet | |
| ccc | Interface: /L: IO-Link /CN: CANopen /PB: PROFIBUS /PN: PROFINET /CV: Analog current and voltage output /D3: RS 485 Modbus | |
| DDD | Special equipment: -PS: Power Setting | |
| EEE | Electrical connection: M12: M12 connector | |
| FFF | -EX: Explosion protection: | |

Note

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

Notes

Observe intended use!

- This product is not a safety sensor and is not intended as personnel protection.
- The product may only be put into operation by competent persons.
- · Only use the product in accordance with its intended use.

For UL applications:

- · For UL applications, use is only permitted in Class 2 circuits in accordance with the NEC (National Electric Code).
- These proximity switches shall be used with UL Listed Cable assemblies rated 30V, 0.5A min, in the field installation, or equivalent (categories: CYJV/CYJV7 or PVVA/PVVA7)

Accessories

Connection technology - Interconnection cables

| | Part no. | Designation | Article | Description |
|--|----------|---------------------------------|-----------------------|---|
| | 50129781 | KDS DN-M12-5A- M12-5A-P3-050 | Interconnection cable | Suitable for interface: IO-Link, DeviceNet, CANopen Connection 1: Connector, M12, Axial, Female, A-coded, 5 -pin Connection 2: Connector, M12, Axial, Male, A-coded, 5 -pin Shielded: Yes Cable length: 5,000 mm Sheathing material: PUR |

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Mounting technology - Swivel mounts

| | Part no. | Designation | Article | Description |
|-----|----------|-------------|----------------------|---|
| EE. | 429046 | BT-2R1 | Mounting bracket set | Contains: 2x BT-R swivel mount, 1 cylinder for mounting on the light curtain Fastening, at system: Through-hole mounting Mounting bracket, at device: Clampable Type of mounting device: Turning, 360° Material: Metal, Plastic |

| | Part no. | Designation | Article | Description |
|-----|----------|---------------------------------|---------|--|
| 166 | 50121098 | SET MD12-US2-IL1.1 + Zub. | | Interface: USB Connections: 2 Piece(s) Degree of protection: IP 20 |

Services

| Part no. | Designation | Article | Description |
|----------|-------------|------------------|---|
| S981001 | CS10-S-110 | Start-up support | Details: Performed at location of customer's choosing, duration: max. 10 hours. Conditions: Devices and connection cables are already mounted, price not including travel costs and, if applicable, accommodation expenses. Restrictions: No mechanical (mounting) and electrical (wiring) work performed, no changes (attachments, wiring, programming) to third-party components in the nearby environment. |
| S981005 | CS10-T-110 | Product training | Details: Location and content to be agreed upon, duration: max. 10 hours. Conditions: Price not including travel costs and, if applicable, accommodation expenses. Restrictions: Travel costs and accommodation expenses charged separately and according to expenditure. |