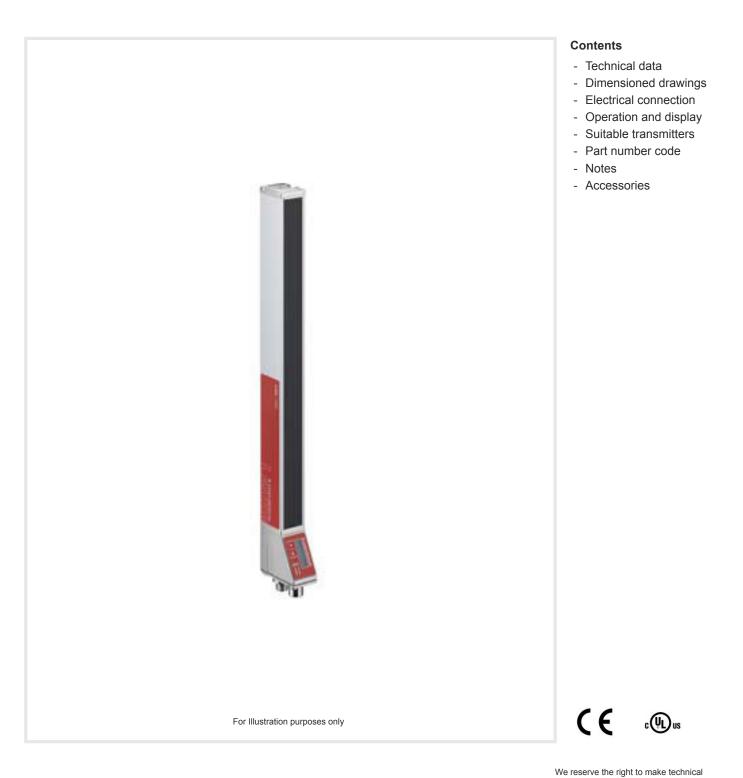


Technical data sheet Light curtain receiver Part no.: 50122984 CML720i-R10-2720.A/PB-M12



 Leuze electronic GmbH + Co. KG
 info@leuze.com • www.leuze.com
 changes

 The Sensor People
 In der Braike 1, D-73277 Owen/Germany
 Phone: +49 7021 573-0 • Fax: +49 7021 573-199
 eng • 2025-04-04

Technical data

Leuze

| Series | 720 |
|---|---|
| Operating principle | Throughbeam principle |
| Device type | Receiver |
| Contains | 2x BT-NC sliding block |
| Application | Object measurement |
| | |
| Special version | |
| Special version | Crossed-beam scanning |
| | Diagonal-beam scanning |
| | Parallel-beam scanning |
| Optical data | |
| Dperating range | 0.3 7 m |
| Dperating range | Guaranteed operating range |
| Dperating range limit | 0.2 9 m |
| Operating range limit | Typical operating range |
| Neasurement field length | 2,720 mm |
| Number of beams | 272 Piece(s) |
| Beam spacing | 10 mm |
| | |
| Measurement data | 00 |
| /linimum object diameter | 20 mm |
| Electrical data | |
| Protective circuit | Polarity reversal protection |
| | Short circuit protected |
| | Transient protection |
| Performance data | |
| Supply voltage U _R | 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 trans mitter and receiver. |
| | |
| Inputs/outputs selectable | 100 1 |
| Output current, max. Input resistance | 100 mA |
| Number of inputs/outputs selectable | 6,000 Ω |
| Туре | Inputs/outputs selectable |
| Voltage type, outputs | DC |
| Switching voltage, outputs | Typ. U _B / 0 V |
| Voltage type, inputs | DC |
| Switching voltage, inputs | high: ≥6V |
| g, | $low: \leq 4 V$ |
| | |
| Input/output 1 | |
| Activation/disable delay | 1 ms |
| ime behavior | |
| | |
| Cycle time | 8.56 ms |
| Cycle time Response time per beam | 8.56 ms 30 μs |
| Response time per beam | |
| Response time per beam | 30 µs |
| Response time per beam | |
| Response time per beam nterface Type PROFIBUS DP | 30 μs PROFIBUS DP |
| Response time per beam nterface Гуре | 30 µs |

| Service interface | | | |
|-----------------------|-------------------------------|------------------------------|--|
| Туре | | IO-Link | |
| | IO-Link | | |
| | Function | Configuration via software | |
| | | Service | |
| ~ | | | |
| C | onnection | | |
| | umber of connections | 2 Piece(s) | |
| Ы | ug outlet | Axial | |
| | Connection 1 | | |
| | Function | Configuration interface | |
| | | Connection to transmitter | |
| | | Signal IN | |
| | | Signal OUT | |
| | | Voltage supply | |
| | Type of connection | Connector | |
| | Thread size | M12 | |
| | Туре | Male | |
| | Material | Metal | |
| | No. of pins | 8 -pin | |
| | Encoding | A-coded | |
| | Ŭ | | |
| | Connection 2 | | |
| | Function | BUS IN | |
| | | BUS OUT | |
| | Type of connection | Connector | |
| | Thread size | M12 | |
| | Туре | Female | |
| | Material | Metal | |
| | No. of pins | 5 -pin | |
| | Encoding | B-coded | |
| M | echanical data | | |
| De | esign | Cubic | |
| Dimension (W x H x L) | | 29 mm x 35.4 mm x 2,795 mm | |
| | ousing material | Metal | |
| M | etal housing | Aluminum | |
| Le | ens cover material | Plastic | |
| Ne | et weight | 2,750 g | |
| Housing color | | Silver | |
| Ту | pe of fastening | Groove mounting | |
| | | Via optional mounting device | |
| 0 | peration and display | | |
| Ту | vpe of display | LED | |
| | | OLED display | |
| N | umber of LEDs | 2 Piece(s) | |
| Ту | pe of configuration | Software | |
| | | Teach-in | |
| 0 | perational controls | Membrane keyboard | |
| - | n inanmantal data | | |
| | nvironmental data | | |
| | mbient temperature, operation | -30 60 °C | |
| A | mbient temperature, storage | -40 70 °C | |
| | | | |

Technical data

Certifications

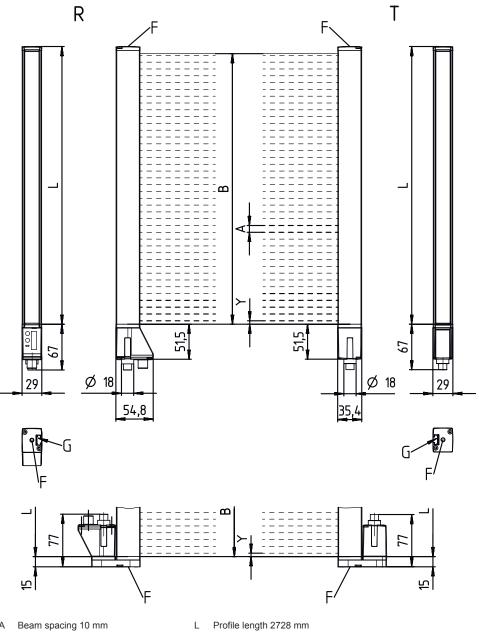
Classification

| Customs tariff number | 90314990 |
|-----------------------|----------|
| ECLASS 5.1.4 | 27270910 |
| ECLASS 8.0 | 27270910 |
| ECLASS 9.0 | 27270910 |
| ECLASS 10.0 | 27270910 |
| ECLASS 11.0 | 27270910 |
| ECLASS 12.0 | 27270910 |
| ECLASS 13.0 | 27270910 |
| ECLASS 14.0 | 27270910 |
| ECLASS 15.0 | 27270910 |
| 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



Beam spacing 10 mm А

Fastening groove

- В Measurement field length 2720 mm
- F M6 thread

G

R Receiver

Т

5 mm Υ

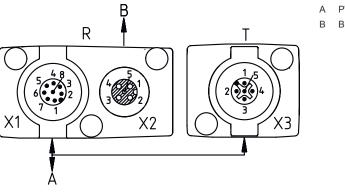
Transmitter

We reserve the right to make technical Leuze electronic GmbH + Co. KG info@leuze.com • www.leuze.com changes
 The Sensor People
 In der Braike 1, D-73277 Owen/Germany
 Phone: +49 7021 573-0 • Fax: +49 7021 573-199
 eng • 2025-04-04

Leuze

Dimensioned drawings





A PWR / SW IN / OUTB BUS IN / OUT

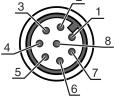
Electrical connection

Connection 1

| Function | Configuration interface |
|--------------------|---------------------------|
| i uncuon | - |
| | Connection to transmitter |
| | Signal IN |
| | Signal OUT |
| | Voltage supply |
| Type of connection | Connector |
| Thread size | M12 |
| Туре | Male |
| Material | Metal |
| No. of pins | 8 -pin |
| Encoding | A-coded |

Pin Pin assignment

| 1 | V+ | | |
|---|------------|--|--|
| 2 | I/O 1 | | |
| 3 | GND | | |
| 4 | IO-Link | | |
| 5 | I/O 2 | | |
| 6 | RS 485 Tx+ | | |
| 7 | RS 485 Tx+ | | |
| 8 | FE/SHIELD | | |
| | | | |



Connection 2

| Function | BUS IN |
|--------------------|-----------|
| | BUS OUT |
| Type of connection | Connector |
| Thread size | M12 |
| Туре | Female |
| Material | Metal |
| No. of pins | 5 -pin |
| Encoding | B-coded |

Electrical connection

Pin Pin assignment 2 1 V+ 2 1 3 PB GND 3 9B GND 4 Tx+ 5 FE/SHIELD 5 FE/SHIELD 4 1 1 1 1 1 1 1 1 1 3 1 3 1 3 3 1 3 3 1 3 3 3 3 3 3 3 3 3 3 3 3 3 4 3 4 3 4 3 4</

Operation and display

| LED | Display | Meaning |
|-----|--------------------------|--|
| 1 | Green, continuous light | Operational readiness |
| | Green, flashing | Teach / error |
| 2 | Yellow, continuous light | Light path free, with function reserve |
| | Yellow, flashing | No function reserve |
| | Off | Object detected |

Suitable transmitters

| Part no. | Designation | Article | Description |
|--------------|----------------------------|------------------------------|---|
| 50119421 | CML720i-T10- 2720.A-M12 | Light curtain transmitter | Operating range: 0.3 7 m Connection: Connector, M12, Axial, 5 -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 |
| Y | Device type T: transmitter R: receiver |
| 22 | 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: Axial connector outlet 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 |

Leuze

Part number code



| DDD | Special equipment -PS: Power Setting |
|-----|--|
| EEE | Electrical connection M12: M12 connector |
| FFF | -EX: Explosion protection |
| | Note |
| | |
| A | S A list with all available device types can be found on the Leuze 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 - Connection cables

| Part no. | Designation | Article | Description |
|--------------|------------------------|------------------|---|
| 50132079 | KD U-M12-5A-V1- 050 | Connection cable | Connection 1: Connector, M12, Axial, Female, A-coded, 5 -pin Connector, LED: No Connection 2: Open end Shielded: No Cable length: 5.000 mm Sheathing material: PVC |

Connection technology - Y distribution cables

| | Part no. | Designation | Article | Description |
|--|----------|-----------------------------|-----------------------|--|
| | 50118183 | K-Y1 M12A-5m- M12A-S-PUR | Interconnection cable | Connection 1: Connector, M12, Axial, Female, A-coded, 5 -pin Connection 2: Connector, M12, Axial, Male, A-coded, 5 -pin Connection 3: Connector, M12, Axial, Female, A-coded, 8 -pin Shielded: Yes Cable length fork 1: 5,000 mm Cable length fork 2: 150 mm Sheathing material: PUR |

Leuze

Mounting technology - Mounting brackets

| Part no. | Designation | Article | Description |
|--------------|----------------|---------------------|---|
| 50142900 | BT 700M.5-2SET | Mounting device set | Design of mounting device: Bracket mounting Fastening, at system: Through-hole mounting, T slotted hole Mounting bracket, at device: Screw type, Sliding block Type of mounting device: Rigid Material: Steel |

Configuration devices

Accessories

| | Part no. | Designation | Article | Description |
|-----|----------|------------------------------|-----------------|--|
| 165 | 50121098 | SET MD12-US2-IL1.1 + Zub. | Diagnostics set | 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. |
| 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. |

Note

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