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Part no.: 50131896 CML720i-R05-320.A/PN-M12 Light curtain receiver





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Part no.: 50131896 – CML720i-R05-320.A/PN-M12 – Light curtain receiver

Technical data

| Series 720 Operating principle Throughbeam principle Device type Receiver Contains 2x BT-NC sliding block Application Object measurement Operating range Operating range 0.1 3.5 m Operating range 0.1 3.5 m Operating range 0.1 3.5 m Operating range limit 0.1 4.5 m Measurement field length 320 mm Number of beams 64 Piece(s) Beam spacing 5 mm Electrical data Protective circuit Polarity reversal protection Short circuit protected Transient protection Short circuit protection Short circuit protection Short circuit protection Transient protection Transient protection Transient protection Short circuit protection Short circuit protection Transient prote | Basic data | |
|--|--|--|
| Operating principle Throughbeam principle Device type Receiver Contains 2x BT-NC sliding block Application Object measurement Operating range Guaranteed operating range Operating range 0.1 3.5 m Operating range limit 0.1 3.5 m Operating range limit 0.1 4.5 m Measurement field length 320 mm Number of beams 64 Piece(s) Beam spacing 5 mm Minimum object diameter 10 mm Electrical data Polarity reversal protection short circuit protected transient protection Short circuit protected transient protection Short circuit protected transient protection Supply voltage Ug 18 30 V. DC Residual ripple 0 165 RA, The specified values refer to the entire package co sisting of transmiter and receiver. Input resistance 6.000 Ω Number of inputs/outputs selectable 2 Piece(s) Type Inputs/outputs selectable Voltage type, outputs DC Switching voltage, outputs DC Voltage type, inputs DC | | 720 |
| Device type Receiver Contains 2x BT-NC silding block Application Object measurement Optral data Operating range Guaranteed operating range Operating range 0.13.5 m Operating range Operating range limit 0.14.5 m Measurement field length Measurement field length 320 mm Number of beams Measurement data Measurement field length 320 mm Number of beams 64 Piece(s) Beam spacing 5 mm Measurement data Measurement field length 320 mm Measurement data Minimum object diameter 10 mm Measurement data Measurement data Minimum object diameter 10 mm Measurement data Measurement grotection Protective circuit Polarity reversal protection Short circuit protected Transient protection Short circuit protected Transient protection Supply voltage Ug 18 30 V , DC Residual ripple 0 15 % , From Ug Open-circuit current 0 15 % or , From Ug Open-circuit current Ministro of protected Transient protection Supply voltage Ug 10 | | |
| Contains 2x BT-NC sliding block Application Object measurement Operating range Guaranteed operating range Operating range 0.13.5 m Operating range limit Typical operating range Operating range limit Typical operating range Operating range limit 0.14.5 m Measurement field length 320 nm Number of beams 64 Piece(s) Beam spacing 5 mm Measurement data Minimum object diameter Minimum object diameter 10 mm Protective circuit Polarity reversal protection Short circuit protected Transient protection Supply voltage Ug 18 30 V, DC Residual ripple 0 15 % , From Ug Open-circuit current 0 15 % , From Ug Open-circuit current 0 15 % , From Ug Open-circuit current 0 15 % , From Ug Output current, max. 100 mA Input resistance 6,000 Ω Number of inputs/outputs selectable 2 Piece(s) Type Input/soluputs selectable Voltage type, outputs DC Switching voltage, outputs | | |
| Application Object measurement Operating range Guaranteed operating range Operating range 0.1 3.5 m Operating range limit 0.1 4.5 m Measurement field length 320 mm Number of beams 64 Piece(s) Beam spacing 5 mm Minimum object diameter 10 mm Electrical data Protective circuit Polarity reversal protection Stort circuit protected Transient protection Performance data 9 Supply voltage UB 18 30 V, DC Residual ripple 0 15 % , From UB Open-circuit current 0 165 mA , The specified values refer to the entire package co sisting of transmitter and receiver. Input resistance 6,000 Ω Number of inputs/outputs selectable 2 Piece(s) Type Inputs/outputs selectable Voltage type, outputs DC Switching voltage, outputs DC Switching voltage, inputs | | |
| Optical data Guaranteed operating range Operating range 0.1 3.5 m Operating range limit Typical operating range Operating range limit 0.1 4.5 m Measurement field length 320 mm Number of beams 64 Piece(s) Beam spacing 5 mm Measurement data Minimum object diameter Minimum object diameter 10 mm Fleetrical data Polarity reversal protection Short circuit protected Transient protection Short circuit protected Transient protection Supply voltage Up 18 30 V , DC Residual ripple 0 15% , From UB Open-circuit current 0 15% , From UB Output current, max. 100 mA Input/outputs selectable 2 Piece(s) Type Inputs/outputs selectable Output current, max. 100 mA Input resistance 6,000 Q Number of inputs/outputs selectable 2 Piece(s) Type Input/output selectable Voltage type, outputs DC Switching voltage, unputs DC Switching voltage, inputs | | |
| Operating range Guaranteed operating range Operating range limit 0.13.5 m Operating range limit 0.13.5 m Operating range limit 0.14.5 m Measurement field length 320 mm Number of beams 64 Piece(s) Beam spacing 5 mm Measurement data Minimum object diameter Minimum object diameter 10 mm Electrical data Polarity reversal protection Short dircuit protected Transient protection Protective circuit Polarity reversal protection Short dircuit protected Transient protection Supply voltage UB 1830 V , DC Residual ripple 015 % , From UB Open-circuit current 015 % , From UB Output current, max. 100 mA Inputs/outputs selectable 100 mA Inputs/outputs selectable 2 Piece(s) Voltage type, outputs DC Switching voltage, outputs Typ. UB / 0 V Voltage type, outputs DC Switching voltage, outputs Typ. UB / 0 V Voltage type, inputs DC Switching voltage, inputs DC Switching voltage | Αρμισατιστ | Object measurement |
| Operating range Guaranteed operating range Operating range 0.13.5 m Operating range limit Typical operating range Operating range limit 0.14.5 m Measurement field length 320 mm Number of beams 64 Piece(s) Beam spacing 5 mm Measurement data Minimum object diameter 10 mm Fortective circuit Protective circuit Polarity reversal protection Short circuit protected Transient protection Supply voltage UB 1830 V , DC Residual ripple 015 % , From UB Open-circuit current 0165 m , The specified values refer to the entire package co sisting of transitter and receiver. Inputs/outputs selectable 100 mA Output current, max. 100 mA Inputs/outputs selectable 2 Piece(s) Voltage type, outputs DC Switching voltage, outputs DC Switching voltage, outputs DC Switching voltage, inputs DC Switching voltage, inputs DC Switching voltage, inputs DC Switching voltage, inputs <t< td=""><td>Onthe Islats</td><td></td></t<> | Onthe Islats | |
| Operating range 0.13.5 m Operating range limit Typical operating range Operating range limit 0.14.5 m Measurement field length 320 mm Number of beams 64 Piece(s) Beam spacing 5 mm Measurement data Minimum object diameter Minimum object diameter 10 mm Electrical data Polarity reversal protection Short circuit protected Transient protection Supply voltage UB 18 30 V, DC Residual ripple 0 15 % , From UB Open-circuit current 0 165 m , The specified values refer to the entire package co siting of transmitter and receiver. Inputs/outputs selectable 2 Piece(s) Output current, max. 100 mA Inputs/outputs selectable 2 Piece(s) Type Inputs/outputs selectable Voltage type, outputs DC Switching voltage, outputs DC Switching voltage, inputs DC Switching voltage, inputs DC Switching voltage, inputs high: 26V low: :4V Inputs/output 1 bigh: 26V | • | Outprostend encoding serves |
| Operating range limit Typical operating range Operating range limit 0.1 4.5 m Measurement field length 320 mm Number of beams 64 Piece(s) Beam spacing 5 mm Measurement data Minimum object diameter Minimum object diameter 10 mm Electrical data Polarity reversal protection Protective circuit Polarity reversal protection Supply voltage Ug 18 30 V, DC Residual ripple 0 15 %, From Ug Open-circuit current 0 165 mA. The specified values refer to the entire package co sisting of transmitter and receiver. Input solutputs selectable 2 Piece(s) Number of inputs/outputs selectable 2 Piece(s) Type Inputs/outputs selectable Voltage type, outputs DC Switching voltage, outputs DC Switching voltage, inputs DC Switching voltage, inputs< | | |
| Operating range limit 0.1 4.5 m Measurement field length 320 mm Number of beams 64 Piece(s) Beam spacing 5 mm Messurement data 10 mm Minimum object diameter 10 mm Electrical data Protective circuit Polarity reversal protection Short circuit protected Transient protection Supply voltage Ug 18 30 V, DC Residual ripple 0 15 %, From Ug Open-circuit current 0 165 mA, The specified values refer to the entire package co sisting of transmitter and receiver. Inputs/outputs selectable 0 piece(s) Type Inputs/outputs selectable Voltage type, outputs DC Switching voltage, outputs DC Switching voltage, outputs DC Switching voltage, inputs DC Switching voltage, inputs DC Switching voltage, inputs high: 26V low: 54V | | |
| Number of beams 320 mm Number of beams 64 Piece(s) Beam spacing 5 mm Measurement data 10 mm Minimum object diameter 10 mm Electrical data Protective circuit Polarity reversal protection Short circuit protected Transient protection Supply voltage UB 18 30 V , DC Residual ripple 0 15 % , From UB Open-circuit current 0 165 mA , The specified values refer to the entire package co sisting of transmitter and receiver. Input resistance 6,000 Ω Number of inputs/outputs selectable 2 Piece(s) Type Inputs/outputs selectable Voltage type, outputs DC Switching voltage, outputs DC Switching voltage, inputs DC | | |
| Number of beams 64 Piece(s) Beam spacing 5 mm Measurement data 10 mm Minimum object diameter 10 mm Electrical data Polarity reversal protection Short circuit protected Transient protection Performance data Supply voltage UB Supply voltage UB 18 30 V , DC Residual ripple 0 15 % , From UB Open-circuit current 0 165 mA , The specified values refer to the entire package co sisting of transmitter and receiver. Input/outputs selectable 0 Piece(s) Output current, max. 100 mA Input resistance 6,000 Ω Number of inputs/outputs selectable 2 Piece(s) Type Inputs/outputs selectable Voltage type, outputs DC Switching voltage, outputs Typ. UB / 0 V Voltage type, inputs DC Switching voltage, inputs | | |
| Beam spacing 5 mm Measurement data Minimum object diameter Minimum object diameter 10 mm Electrical data Polarity reversal protection Short circuit protected Transient protection Performance data Supply voltage UB Supply voltage UB 18 30 V , DC Residual ripple 0 15 % , From UB Open-circuit current 0 155 mA , The specified values refer to the entire package co sisting of transmitter and receiver. Inputs/outputs selectable Output current, max. Output current, max. 100 mA Inputs/outputs selectable 2 Piece(s) Type Inputs/outputs selectable Voltage type, outputs DC Switching voltage, outputs Typ. Ug / 0 V Voltage type, inputs DC Switching voltage, inputs DC | | |
| Measurement data Minimum object diameter 10 mm Electrical data Protective circuit Polarity reversal protection Short circuit protected Transient protection Performance data Supply voltage UB 18 30 V , DC Residual ripple 0 15 % , From UB Open-circuit current 0 165 mA , The specified values refer to the entire package co sisting of transmitter and receiver. Inputs/outputs selectable 0 0 mA Output current, max. 100 mA Input resistance 6,000 Ω Number of inputs/outputs selectable 2 Piece(s) Type Inputs/outputs selectable Voltage type, outputs DC Switching voltage, outputs DC Switching voltage, inputs DC Input/output 1 Input/output 1 | | |
| Minimum object diameter 10 mm Electrical data Protective circuit Protective circuit Polarity reversal protection Short circuit protected Transient protection Performance data Supply voltage UB 18 30 V , DC Residual ripple 0 15 % , From UB Open-circuit current 0 165 mA , The specified values refer to the entire package consisting of transmitter and receiver. Inputs/outputs selectable 0 Output current, max. 100 mA Input resistance 6,000 Ω Number of inputs/outputs selectable 2 Piece(s) Type Inputs/outputs selectable Voltage type, outputs DC Switching voltage, outputs DC Switching voltage, inputs DC Switching voltage, inputs DC Switching voltage, inputs DC Input/output 1 Input/output 1 | Beam spacing | 5 mm |
| Minimum object diameter 10 mm Electrical data Polarity reversal protection Short circuit protected Transient protection Performance data Supply voltage UB Supply voltage UB 18 30 V , DC Residual ripple 0 15 % , From UB Open-circuit current 0 165 mA , The specified values refer to the entire package co sisting of transmitter and receiver. Inputs/outputs selectable 0 Output current, max. 100 mA Input resistance 6,000 Ω Number of inputs/outputs selectable 2 Piece(s) Type Inputs/outputs selectable Voltage type, outputs DC Switching voltage, outputs DC Switching voltage, inputs DC | | |
| Electrical data Protective circuit Polarity reversal protection Short circuit protected Transient protection Performance data Supply voltage UB 18 30 V , DC Residual ripple 0 15 % , From UB Open-circuit current 0 15 % , From UB Open-circuit current 0 165 mA , The specified values refer to the entire package consisting of transmitter and receiver. Inputs/outputs selectable 0 Output current, max. 100 mA Input resistance 6,000 Ω Number of inputs/outputs selectable 2 Piece(s) Type Inputs/outputs selectable Voltage type, outputs DC Switching voltage, outputs DC Switching voltage, inputs DC | | |
| Protective circuit Polarity reversal protection Short circuit protected Transient protection Performance data Supply voltage UB 18 30 V , DC Residual ripple 0 15 % , From UB Open-circuit current 0 165 mA , The specified values refer to the entire package consisting of transmitter and receiver. Inputs/outputs selectable 0 100 mA Output current, max. 100 mA Input resistance 6,000 Ω Number of inputs/outputs selectable 2 Piece(s) Type Inputs/outputs selectable Voltage type, outputs DC Switching voltage, outputs DC Switching voltage, inputs DC Switching voltage, inputs DC Switching voltage, inputs bC Input/output 1 100 reserve | Minimum object diameter | 10 mm |
| Protective circuit Polarity reversal protection Short circuit protected Transient protection Performance data Supply voltage UB 18 30 V , DC Residual ripple 0 15 % , From UB Open-circuit current 0 165 mA , The specified values refer to the entire package consisting of transmitter and receiver. Inputs/outputs selectable 0 100 mA Output current, max. 100 mA Input resistance 6,000 Ω Number of inputs/outputs selectable 2 Piece(s) Type Inputs/outputs selectable Voltage type, outputs DC Switching voltage, outputs DC Switching voltage, inputs DC Switching voltage, inputs DC Switching voltage, inputs bC Input/output 1 100 reserve | | |
| Short circuit protected Transient protection Performance data Supply voltage UB 18 30 V , DC Residual ripple 0 15 % , From UB Open-circuit current 0 165 mA , The specified values refer to the entire package consisting of transmitter and receiver. Inputs/outputs selectable 0 Output current, max. 100 mA Input resistance 6,000 Ω Number of inputs/outputs selectable 2 Piece(s) Type Inputs/outputs selectable Voltage type, outputs DC Switching voltage, outputs DC Switching voltage, inputs DC Switching voltage, inputs DC Switching voltage, inputs DC Switching voltage, inputs high: ≥6V low: ≤4V | Electrical data | |
| Transient protection Performance data Supply voltage UB 18 30 V , DC Residual ripple 0 15 % , From UB Open-circuit current 0 165 mA , The specified values refer to the entire package consisting of transmitter and receiver. Inputs/outputs selectable 0 165 mA , The specified values refer to the entire package consisting of transmitter and receiver. Output current, max. 100 mA Input resistance 6,000 Ω Number of inputs/outputs selectable 2 Piece(s) Type Inputs/outputs selectable Voltage type, outputs DC Switching voltage, outputs DC Switching voltage, inputs DC Switching voltage, inputs DC Switching voltage, inputs DC Switching voltage, inputs bigh: ≥6V low: ≤4V Input/output 1 Input/output 1 | Protective circuit | Polarity reversal protection |
| Supply voltage UB 18 30 V , DC Residual ripple 0 15 % , From UB Open-circuit current 0 165 mA , The specified values refer to the entire package consisting of transmitter and receiver. Inputs/outputs selectable 0 mA Output current, max. 100 mA Input resistance 6,000 Ω Number of inputs/outputs selectable 2 Piece(s) Type Inputs/outputs selectable Voltage type, outputs DC Switching voltage, outputs DC Switching voltage, inputs DC Switching voltage, inputs DC Switching voltage, inputs bC Input/output 1 Input/output 1 | | Transient protection |
| Residual ripple 0 15 % , From UB Open-circuit current 0 165 mA , The specified values refer to the entire package consisting of transmitter and receiver. Inputs/outputs selectable 0 mA Output current, max. 100 mA Input resistance 6,000 Ω Number of inputs/outputs selectable 2 Piece(s) Type Inputs/outputs selectable Voltage type, outputs DC Switching voltage, outputs DC Switching voltage, inputs DC Switching voltage, inputs DC Switching voltage, inputs DC Switching voltage, inputs DC Input/output 1 Input/output 1 | Performance data | |
| Open-circuit current 0 165 mA , The specified values refer to the entire package consisting of transmitter and receiver. Inputs/outputs selectable 0 Output current, max. 100 mA Input resistance 6,000 Ω Number of inputs/outputs selectable 2 Piece(s) Type Inputs/outputs selectable Voltage type, outputs DC Switching voltage, outputs DC Switching voltage, inputs DC Switching voltage, inputs DC Switching voltage, inputs DC Switching voltage, inputs DC Input/output 1 Input/output 1 | Supply voltage U _B | 18 30 V , DC |
| Inputs/outputs selectable Output current, max. 100 mA Input resistance 6,000 Ω Number of inputs/outputs selectable 2 Piece(s) Type Inputs/outputs selectable Voltage type, outputs DC Switching voltage, outputs DC Voltage type, inputs DC Switching voltage, inputs DC Switching voltage, inputs DC Input/output 1 Input/output 1 | Residual ripple | 0 15 % , From U _B |
| Inputs/outputs selectableOutput current, max.100 mAInput resistance $6,000 \Omega$ Number of inputs/outputs selectable2 Piece(s)TypeInputs/outputs selectableVoltage type, outputsDCSwitching voltage, outputsDCVoltage type, inputsDCSwitching voltage, inputsDCSwitching voltage, inputsDCInput/output 1Input/output 1 | Open-circuit current | 0 165 mA , The specified values refer to the entire package con- sisting of transmitter and receiver. |
| Output current, max. 100 mA Input resistance 6,000 Ω Number of inputs/outputs selectable 2 Piece(s) Type Inputs/outputs selectable Voltage type, outputs DC Switching voltage, outputs DC Voltage type, inputs DC Switching voltage, outputs DC Switching voltage, inputs DC Input/output 1 high: ≥6V low: ≤4V | Inputs/outputs selectable | |
| Number of inputs/outputs selectable 2 Piece(s) Type Inputs/outputs selectable Voltage type, outputs DC Switching voltage, outputs Typ. U _B / 0 V Voltage type, inputs DC Switching voltage, inputs DC Switching voltage, inputs DC Input/output 1 Input/output 1 | | 100 mA |
| Type Inputs/outputs selectable Voltage type, outputs DC Switching voltage, outputs Typ. U _B / 0 V Voltage type, inputs DC Switching voltage, inputs DC Switching voltage, inputs DC Input/output 1 Input/output 1 | Input resistance | 6,000 Ω |
| Type Inputs/outputs selectable Voltage type, outputs DC Switching voltage, outputs Typ. U _B / 0 V Voltage type, inputs DC Switching voltage, inputs DC Switching voltage, inputs DC Input/output 1 Input/output 1 | Number of inputs/outputs selectable | 2 Piece(s) |
| Voltage type, outputs DC Switching voltage, outputs Typ. U _B / 0 V Voltage type, inputs DC Switching voltage, inputs high: ≥6V low: ≤4V | | |
| Voltage type, inputs DC Switching voltage, inputs high: ≥6V low: ≤4V Input/output 1 Imput/output 1 | | DC |
| Switching voltage, inputs high: ≥6∨ Input/output 1 Input/output 1 | Switching voltage, outputs | Тур. U _B / 0 V |
| Switching voltage, inputs high: ≥6∨ Input/output 1 Input/output 1 | Voltage type, inputs | DC |
| Input/output 1 | | high: ≥6V |
| | Input/output 1 | ·····-·· |
| | | 1 ms |
| | | |
| Timing | Timing | |
| Readiness delay 1,500 ms | - | 1,500 ms |
| Cycle time 2.32 ms | | |
| Response time per beam 30 µs | | |
| | ······································ | F- |
| Interface | Interface | |
| Type PROFINET | | |
| -7F- 1100100-1 | Туре | PROFINET |

Part no.: 50131896 – CML720i-R05-320.A/PN-M12 – Light curtain receiver

| Profinet | | |
|----------------------|---|--|
| Function | Process | |
| Conformance class | В | |
| Protocol | PROFINET RT | |
| Switch functionality | Integrated | |
| Transmission speed | 10 Mbit/s 100 Mbit/s | |
| | | |
| ervice interface | | |
| ре | IO-Link | |
| IO-Link | | |
| Function | Configuration via software Service | |
| onnection | | |
| umber of connections | 3 Piece(s) | |
| 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 | |
| Connection 2 | | |
| Function | BUS IN | |
| Type of connection | Connector | |
| Thread size | M12 | |
| Туре | Female | |
| Material | Metal | |
| No. of pins | 4 -pin | |
| Encoding | D-coded | |
| Connection 3 | | |
| Function | BUS OUT | |
| Type of connection | Connector | |
| Thread size | M12 | |
| Туре | Female | |
| Material | Metal | |
| No. of pins | 4 -pin | |
| | D-coded | |

| Mechanical data | | |
|-----------------------|--------------------------|--|
| Design | Cubic | |
| Dimension (W x H x L) | 29 mm x 35.4 mm x 395 mm | |
| Housing material | Metal , Aluminum | |
| Lens cover material | Plastic | |
| Net weight | 550 g | |

Leuze electronic GmbH + Co. KG, In der Braike 1, 73277 Owen Phone: +49 7021 573-0, Fax: +49 7021 573-199 info@leuze.com • www.leuze.com We reserve the right to make technical changes • eng 2019-12-11 3 / 10

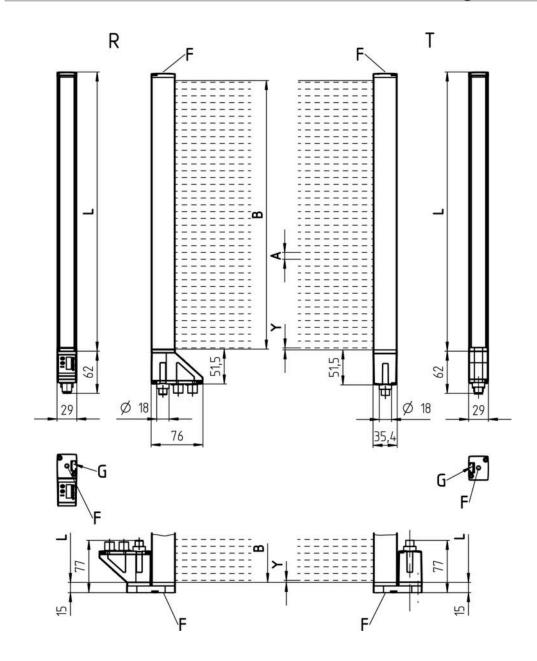
Part no.: 50131896 – CML720i-R05-320.A/PN-M12 – Light curtain receiver

| Housing color | Silver | |
|--------------------------------|---|--|
| Type of fastening | Groove mounting Via optional mounting device | |
| | | |
| Operation and display | | |
| Type of display | LED OLED display | |
| Number of LEDs | 4 Piece(s) | |
| Type of configuration | Software Teach-in | |
| Operational controls | Membrane keyboard | |
| Environmental data | | |
| Ambient temperature, operation | -30 60 °C | |
| Ambient temperature, storage | -40 70 °C | |
| Certifications | | |
| Degree of protection | IP 65 | |
| Protection class | III | |
| Certifications | c CSA US | |
| 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 | |

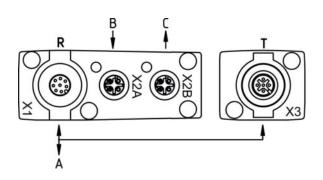
Dimensioned drawings

All dimensions in millimeters

Part no.: 50131896 - CML720i-R05-320.A/PN-M12 - Light curtain receiver



- A Beam spacing 5 mm B Measurement field length 320 mm
- F M6 thread
- G Fastening groove
- L Profile length 328 mm
- T Transmitter
- R Receiver
- Y 2.5 mm



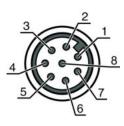
Part no.: 50131896 – CML720i-R05-320.A/PN-M12 – Light curtain receiver

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

Electrical connection

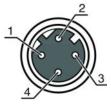
| Connection 1 | X1 | |
|--------------------|---|--|
| Function | Configuration interface Connection to transmitter Signal IN Signal OUT Voltage supply | |
| Type of connection | Connector | |
| Thread size | M12 | |
| Туре | Male | |
| Material | Metal | |
| No. of pins | 8 -pin | |
| Encoding | A-coded | |

| 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 | X2A |
|--------------------|-----------|
| Function | BUS IN |
| Type of connection | Connector |
| Thread size | M12 |
| Туре | Female |
| Material | Metal |
| No. of pins | 4 -pin |
| Encoding | D-coded |

| Pin | Pin assignment |
|-----|----------------|
| 1 | TD0+ |
| 2 | RD0+ |
| 3 | TD0- |
| 4 | RD0- |

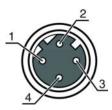


| Connection 3 | X2B |
|--------------------|-----------|
| Function | BUS OUT |
| Type of connection | Connector |
| Thread size | M12 |
| Туре | Female |

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| Connection 3 | Х2В |
|--------------|---------|
| Material | Metal |
| No. of pins | 4 -pin |
| Encoding | D-coded |

| Pin | Pin assignment |
|-----|----------------|
| 1 | TD0+ |
| 2 | RD0+ |
| 3 | TD0- |
| 4 | RD0- |



Operation and display

LEDs

| LED | Display | Meaning |
|-----|---|--|
| 1 | Green, continuous light | Operational readiness |
| | Green, flashing | Teach / error |
| | | Measurement frequency display |
| 2 | Yellow, continuous light | Light path free, with function reserve |
| | Yellow, flashing | No function reserve |
| | Off | Object detected |
| 3 | Green, continuous light (at the X2A / X2B connector) | Link |
| 4 | Yellow, continuous light (at the X2A / X2B connector) | Activity |

Suitable transmitters

| Part no. | Designation | Article | Description |
|----------|---------------------------|------------------------------|---|
| 50119371 | CML720i- T05-320.A-M12 | Light curtain transmitter | Operating range: 0.1 3.5 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 |

Part no.: 50131896 – CML720i-R05-320.A/PN-M12 – Light curtain 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 - Connection cables

| Part no. | Designation | Article | Description |
|----------|------------------------|---------|---|
| 50132079 | KD U-M12-5A- V1-050 | | Connection 1: Connector, M12, Axial, Female, A-coded, 5 -pin Connection 2: Open end Shielded: No Cable length: 5,000 mm Sheathing material: PVC |

Part no.: 50131896 – CML720i-R05-320.A/PN-M12 – Light curtain receiver

| Par | art no. De | esignation | Article | Description |
|------|--------------------|------------|---------|--|
| 5013 | 35074 KS B P7-0 | | | Suitable for interface: Ethernet Connection 1: Connector, M12, Axial, Male, D-coded, 4 -pin Connection 2: Open end Shielded: Yes Cable length: 5,000 mm Sheathing material: PUR |

Connection technology - Interconnection cables

| Part no. | Designation | Article | Description |
|----------|---------------------------------|---------|--|
| | KSS ET-M12-4A- RJ45-A-P7-050 | | Suitable for interface: Ethernet Connection 1: Connector, M12, Axial, Male, D-coded, 4 -pin Connection 2: RJ45 Shielded: Yes Cable length: 5,000 mm Sheathing material: PUR |

Connection technology - Y distribution cables

| Part no. | Designation | Article | Description |
|----------|-----------------------------|--------------------------|--|
| | 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 |

Mounting technology - Mounting brackets

| Part no. | Designation | Article | Description |
|----------|----------------|------------------------|--|
| 50142900 | BT 700M.5-2SET | Mounting device set | Contains: 2x mounting brackets, 1 teach template, 4 M6 x 10 screws 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 |

Mounting technology - Swivel mounts

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

Part no.: 50131896 – CML720i-R05-320.A/PN-M12 – Light curtain receiver

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. |

Note

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