

Technical data sheet Light curtain transmitter

Part no.: 50136323

CML730i-T05-400.R-PS-M12



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Technical data



Basic data

| Series | 730 |
|---------------------|---------------------------------------|
| Operating principle | Throughbeam principle |
| Device type | Transmitter |
| Contains | Accessories for the use of the BT-2R1 |
| Application | Detection of transparent films |
| | Detection of transparent objects |
| | Object detection in film tube |
| | Object measurement |
| | Radiation of semi-transparent media |

Optical data

| Operating range | 0.1 4.5 m |
|------------------------------------|----------------------------|
| Operating range | Guaranteed operating range |
| Operating range, transparent media | 0.1 1.75 m |
| Operating range limit | 0.1 6 m |
| Operating range limit | Typical operating range |
| Measurement field length | 400 mm |
| Number of beams | 80 Piece(s) |
| Beam spacing | 5 mm |
| Light source | LED, Infrared |
| Wavelength | 940 nm |
| | |

Measurement data

| Minimum object diameter | 10 mm |
|-------------------------|-------|
|-------------------------|-------|

Electrical data

| Polarity reversal protection |
|--|
| Short circuit protected |
| Transient protection |
| |
| |
| 18 30 V, DC |
| 0 15 %, From U _B |
| 0 165 mA, The specified values refer to the entire package consisting of transmitter and receiver. |
| |

Time behavior

| Readiness delay | 450 ms |
|-----------------|--------|
| Cycle time | 1 ms |
| | |

Connection

| Number of connections | 1 Piece(s) |
|-----------------------|------------|
| Plug outlet | Rear side |

Connection 1

| Function | Connection to receiver |
|--------------------|------------------------|
| Type of connection | Connector |
| 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) | 29 mm x 35.4 mm x 423 mm |
| Housing material | Metal |
| Metal housing | Aluminum |
| Lens cover material | Plastic |
| Net weight | 650 g |
| 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 |

Certifications

| Degree of protection | IP 65 |
|----------------------|---------------|
| Protection class | III |
| Approvals | c UL US |
| Standards applied | IEC 60947-5-2 |

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 |

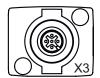
Dimensioned drawings



All dimensions in millimeters



- Beam spacing 5 mm
- В Measurement field length 400 mm
- M6 thread
- Fastening groove
- Profile length 408 mm
- Transmitter
- Receiver
- 2.5 mm



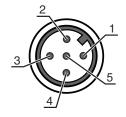
Electrical connection



Connection 1

| Function | Connection to receiver |
|--------------------|------------------------|
| Type of connection | Connector |
| Thread size | M12 |
| Туре | Male |
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| Pin | Pin assignment |
|-----|----------------|
| 1 | FE/SHIELD |
| 2 | V+ |
| 3 | GND |
| 4 | RS 485 Tx+ |
| 5 | RS 485 Tx- |



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Operation and display

| LED | Display | Meaning |
|-----|--|--|
| 1 | Green, continuous light | Continuous mode |
| | 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 |
|----------|---------------------------------|------------------------|--|
| 50136321 | CML730i-R05-400.R/ CV-PS-M12 | Light curtain receiver | Operating range: 0.1 4.5 m Analog outputs: 1 Piece(s), Freely configurable Connection: Connector, M12, Rear side, 8 -pin |

Part number code

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

| Operating principle Measuring light curtain | | | |
|--|--|--|--|
| Series 720i: 720i series 730i: 730i series | | | |
| Device type T: transmitter R: receiver | | | |
| Beam spacing 05: 5 mm 10: 10 mm 20: 20 mm 40: 40 mm | | | |
| Measurement field length [mm], dependent on beam spacing | | | |
| Equipment A: Axial connector outlet R: Rear connector outlet | | | |
| | | | |

Part number code



| 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 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 |
|------------|----------|---------------------------------|-----------------------|---|
| (1) | 50129781 | KDS DN-M12-5A- M12-5A-P3-050 | Interconnection cable | Suitable for interface: 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 |

Accessories



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 |

Mounting technology - Swivel mounts

| Part no. | Designation | Article | Description |
|----------|-------------|----------------------|---|
| 429029 | BT-2RG | Mounting bracket set | Fastening, at system: Through-hole mounting Mounting bracket, at device: Clampable Type of mounting device: Turning, 360° Material: Metal, Plastic |

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. |



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