

# Technical data sheet Light curtain transmitter

Part no.: 50133776

CML730i-T05-1120.A-PS-M12



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## **Technical data**



### Basic data

Series	730
Operating principle	Throughbeam principle
Device type	Transmitter
Contains	2x BT-NC sliding block
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	Guaranteed operating range
Operating range	0.1 4.5 m
Operating range, transparent media	0.1 1.75 m
Operating range limit	Typical operating range
Operating range limit	0.1 6 m
Measurement field length	1,120 mm
Number of beams	224 Piece(s)
Beam spacing	5 mm
Light source	LED, Infrared
LED light wavelength	940 nm

### Measurement data

Minimum	object	diameter	10 mm	
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## **Electrical data** Protective circuit

	Short circuit protected
	Transient protection
Performance data	
Supply voltage U <sub>B</sub>	18 30 V, DC
Residual ripple	0 15 %, From U <sub>B</sub>
Open-circuit current	0 270 mA, The specified values refer to the entire package consisting of transmitter and receiver.

Polarity reversal protection

#### **Timing**

Readiness delay	450 ms
Cycle time	2.44 ms

### Connection

Number of connections	1 Piece(s)
Plug outlet	Axial

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 1,195 mm
Housing material	Metal
Metal housing	Aluminum
Lens cover material	Plastic
Net weight	1,250 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
Certifications	c CSA US
Standards applied	IEC 60947-5-2

### Classification

Customs tariff number	90314990	
eCl@ss 5.1.4	27270910	
eCI@ss 8.0	27270910	
eCl@ss 9.0	27270910	
eCl@ss 10.0	27270910	
eCI@ss 11.0	27270910	
ETIM 5.0	EC002549	
ETIM 6.0	EC002549	
ETIM 7.0	EC002549	

## **Dimensioned drawings**



All dimensions in millimeters



- A Beam spacing 5 mm
- B Measurement field length 1120 mm
- F M6 thread
- G Fastening groove
- L Profile length 1128 mm
- T Transmitter
- R Receiver
- Y 2.5 mm



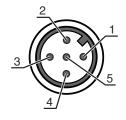
## **Electrical connection**



### **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

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



## **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

P	Part no.	Designation	Article	Description
50		CML730i-R05- 1120.A/CV-PS-M12		Operating range: 0.1 4.5 m Analog outputs: 1 Piece(s), Freely configurable Connection: Connector, M12, Axial, 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: connector outlet, axial 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
<b>(1)</b>	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

## **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
gg.	429046	BT-2R1	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.  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 website in the Download tab of the article detailed page.