

## Technical data sheet

### Light curtain transmitter

Part no.: 50133796

CML730i-T05-1280.R-PS-M12

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For illustration purposes only



## 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	1,280 mm
Number of beams	256 Piece(s)
Beam spacing	5 mm
Light source	LED, Infrared
Wavelength	940 nm

### Measurement data

Minimum object diameter	10 mm
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### 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 ... 270 mA, The specified values refer to the entire package consisting of transmitter and receiver.

### Time behavior

Readiness delay	450 ms
Cycle time	2.76 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
Type	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 1,303 mm
Housing material	Metal
Metal housing	Aluminum
Lens cover material	Plastic
Net weight	1,450 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

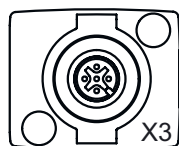
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ECLASS 13.0	27270910
ECLASS 14.0	27270910
ECLASS 15.0	27270910
ETIM 5.0	EC002549
ETIM 6.0	EC002549
ETIM 7.0	EC002549
ETIM 8.0	EC002549
ETIM 9.0	EC002549
ETIM 10.0	EC002549

## Dimensioned drawings

All dimensions in millimeters



- |   |                                  |   |                        |
|---|----------------------------------|---|------------------------|
| A | Beam spacing 5 mm                | L | Profile length 1288 mm |
| B | Measurement field length 1280 mm | T | Transmitter            |
| F | M6 thread                        | R | Receiver               |
| G | Fastening groove                 | Y | 2.5 mm                 |



Electrical connection

Connection 1

Function	Connection to receiver
Type of connection	Connector
Thread size	M12
Type	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

	Part no.	Designation	Article	Description
	50133795	CML730i-R05-1280.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-YYZ-AAAA.BCCDDDD-EEEEFF

CML	Operating principle Measuring light curtain
7XXi	Series 720i: 720i series 730i: 730i series
Y	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
B	Equipment A: Axial connector outlet R: Rear connector outlet

Part number code


CCC	<b>Interface</b> L: IO-Link /CN: CANopen /PB: PROFIBUS /PN: PROFINET /CV: Analog current and voltage output /D3: RS 485 Modbus
DDD	<b>Special equipment</b> -PS: Power Setting
EEE	<b>Electrical connection</b> M12: M12 connector
FFF	<b>-EX: Explosion protection</b>


Note



A list with all available device types can be found on the Leuze website at [www.leuze.com](http://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.

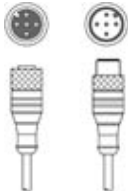
For UL applications:



- 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: 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.

#### Note



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