

# **Technical data sheet Light curtain transmitter**

Part no.: 50118613

CML730i-T10-160.A-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 objects
	Object measurement
Special version	
Special version	Crossed-beam scanning

Diagonal-beam scanning

Parallel-beam scanning

### **Optical data**

option data	
Operating range	0.3 9.5 m
Operating range	Guaranteed operating range
Operating range, transparent media	0.3 3.5 m
Operating range limit	0.2 12 m
Operating range limit	Typical operating range
Measurement field length	160 mm
Number of beams	16 Piece(s)
Beam spacing	10 mm
Light source	LED, Infrared
Wavelength	940 nm

#### Measurement data

Minimum object diameter	20 mm
Electrical data	
Protective circuit	Polarity reversal protection
	Short circuit protected
	Transient protection
Performance data	
Supply voltage U <sub>B</sub>	18 30 V, DC

0 ... 15 %, From U<sub>B</sub>

mitter and receiver.

1 Piece(s)

Axial

0 ... 135 mA, The specified values refer

to the entire package consisting of trans-

### Time behavior

Residual ripple

Open-circuit current

Readiness delay	450 ms
Cycle time	1 ms

### Connection

Plug outlet

Encoding

Number of connections

Connection 1	
Function	Connection to receiver
Type of connection	Connector
Thread size	M12
Type	Male
Material	Metal
No. of pins	5 -pin

A-coded

#### Mechanical data

Design	Cubic
Dimension (W x H x L)	29 mm x 35.4 mm x 235 mm
Housing material	Metal
Metal housing	Aluminum
Lens cover material	Plastic
Net weight	300 g
Housing color	Silver
Type of fastening	Groove mounting
	Via optional mounting device
Net weight Housing color	300 g Silver Groove mounting

#### 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

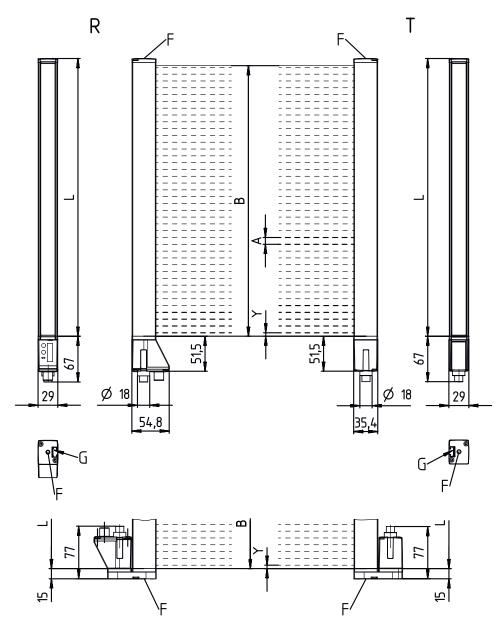
#### Classification

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EC002549

# **Dimensioned drawings**



All dimensions in millimeters



- Beam spacing 10 mm
- В Measurement field length 160 mm
- M6 thread
- Fastening groove
- Profile length 168 mm
- Transmitter
- Receiver
- 5 mm



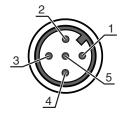
# **Electrical connection**



### **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

Part no.	Designation	Article	Description
50118694	CML730i-R10-160.A/ CN-M12	Light curtain receiver	Operating range: 0.3 9.5 m Interface: CANopen Connection: Connector, M12, Axial, 8 -pin
50118868	CML730i-R10-160.A/ CV-M12	Light curtain receiver	Operating range: 0.3 9.5 m Analog outputs: 2 Piece(s), Voltage, Current Connection: Connector, M12, Axial, 8 -pin
50123308	CML730i-R10-160.A/ D3-M12	Light curtain receiver	Operating range: 0.3 9.5 m Interface: RS 485 Modbus Connection: Connector, M12, Axial, 8 -pin
50118774	CML730i-R10-160.A/ L-M12	Light curtain receiver	Operating range: 0.3 9.5 m Interface: IO-Link Connection: Connector, M12, Axial, 8 -pin

### Suitable receivers



 Part no.	Designation	Article	Description
50123157	CML730i-R10-160.A/ PB-M12	Light curtain receiver	Operating range: 0.3 9.5 m Interface: PROFIBUS DP Connection: Connector, M12, Axial, 8 -pin
50131758	CML730i-R10-160.A/ PN-M12	Light curtain receiver	Operating range: 0.3 9.5 m Interface: PROFINET Connection: Connector, M12, Axial, 8 -pin

### Part number code

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

CML	Operating principle Measuring light curtain			
7XXi	<b>Series</b> 720i: 720i series 730i: 730i series			
Υ	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			
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			
DDD	Special equipment -PS: Power Setting			
EEE	Electrical connection M12: M12 connector			
FFF	-EX: Explosion protection			

### Note



### **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

# 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
P. Co.	429393	BT-2HF	Mounting bracket set	Fastening, at system: Through-hole mounting Mounting bracket, at device: Clampable Type of mounting device: Turning, 360° Material: Metal, Plastic

# Configuration devices

	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

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### **Accessories**



### 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.

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