



Part no.: 50118953
CML730i-T10-800.R-M12
Light curtain transmitter



Figure can vary

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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 objects Object measurement

Optical data	
Operating range	Guaranteed operating range
Operating range	0.3 ... 9.5 m
Operating range, transparent media	0.3 ... 3.5 m
Operating range limit	Typical operating range
Operating range limit	0.2 ... 12 m
Measurement field length	800 mm
Number of beams	80 Piece(s)
Beam spacing	10 mm
Light source	LED , Infrared
LED light 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 UB	18 ... 30 V , DC
Residual ripple	0 ... 15 % , From UB
Open-circuit current	0 ... 215 mA , The specified values refer to the entire package consisting of transmitter and receiver.

Timing	
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
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 823 mm
Housing material	Metal , Aluminum
Lens cover material	Plastic
Net weight	1,000 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

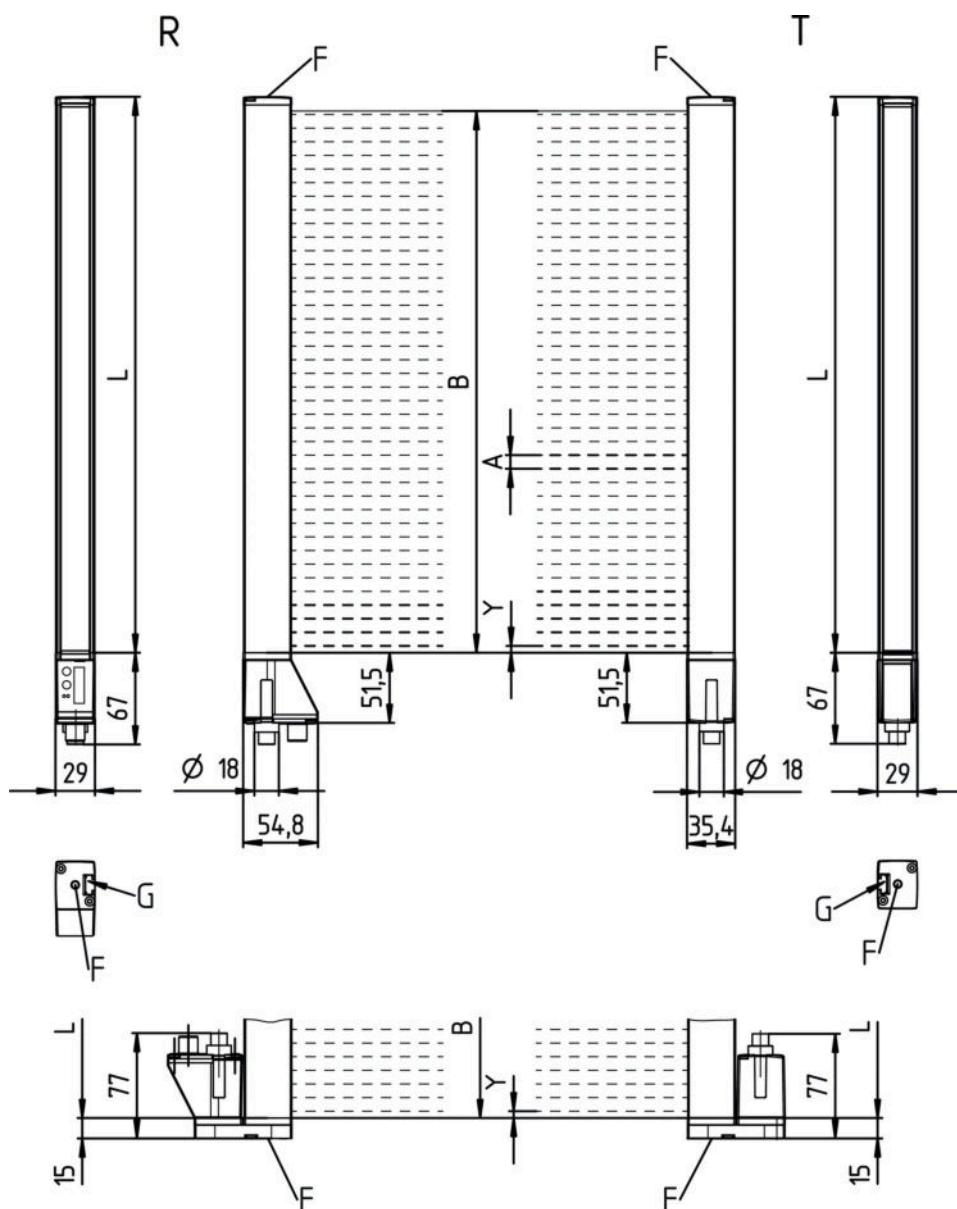
Degree of protection	IP 65
Protection class	III
Certifications	c CSA US
Standards applied	IEC 60947-5-2

Classification

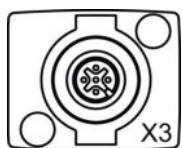
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eCl@ss 9.0	27270910
ETIM 5.0	EC002549
ETIM 6.0	EC002549

Dimensioned drawings

All dimensions in millimeters



A Beam spacing 10 mm
 B Measurement field length 800 mm
 F M6 thread
 G Fastening groove
 L Profile length 808 mm
 T Transmitter
 R Receiver
 Y 5 mm

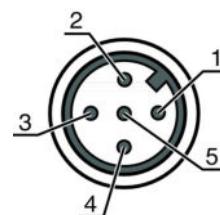


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Electrical connection

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/SCHILD
2	V+
3	GND
4	RS 485 Tx+
5	RS 485 Tx-



Operation and display

LEDs

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
	50119090	CML730i-R10-800.R/CN-M12	Light curtain receiver	Operating range: 0.3 ... 9.5 m Interface: CANopen Connection: Connector, M12, Rear side, 8 -pin
	50119251	CML730i-R10-800.R/CV-M12	Light curtain receiver	Operating range: 0.3 ... 9.5 m Analog outputs: 2 Piece(s), Voltage, Current Connection: Connector, M12, Rear side, 8 -pin
	50123394	CML730i-R10-800.R/D3-M12	Light curtain receiver	Operating range: 0.3 ... 9.5 m Interface: RS 485 Connection: Connector, M12, Rear side, 8 -pin

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	Part no.	Designation	Article	Description
	50119171	CML730i-R10-800.R/L-M12	Light curtain receiver	Operating range: 0.3 ... 9.5 m Interface: IO-Link Connection: Connector, M12, Rear side, 8 -pin
	50123179	CML730i-R10-800.R/PB-M12	Light curtain receiver	Operating range: 0.3 ... 9.5 m Interface: PROFIBUS DP Connection: Connector, M12, Rear side, 8 -pin
	50131785	CML730i-R10-800.R/PN-M12	Light curtain receiver	Operating range: 0.3 ... 9.5 m Interface: PROFINET Connection: Connector, M12, Rear side, 8 -pin

Part number code

Part designation: **CML7XXi-YZZ-AAAA.BCCCDDD-EEEEFFF**

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: 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.

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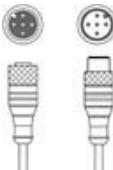
Notes

Observe intended use!
<ul style="list-style-type: none"> • 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:
<ul style="list-style-type: none"> • 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: 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

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
	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

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	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

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.