



the sensor people





Figure can vary

Part no.: 50133775 CML730i-R05-1120.A/CV-PS-M12 Light curtain receiver





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Technical data

Basic data			
Series	730		
Operating principle	Throughbeam principle		
Device type	Receiver		
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		
Measurement data			
Minimum object diameter	10 mm		
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.		
Outputs			
Number of analog outputs	1 Piece(s)		
Analog outputs			
Current	0 24 mA		
Voltage	0 11 V		
Analog output 1			
Туре	Freely configurable		



nputs/outputs selectable output current, max.	100 mA			
nput resistance	6,000 Ω			
<u>·</u>	3 Piece(s)			
Number of inputs/outputs selectable	Inputs/outputs selectable			
Type				
Voltage type, outputs	DC			
Switching voltage, outputs	Typ. U _B / 0 V DC high: ≥6V low: ≤4V			
Voltage type, inputs				
Switching voltage, inputs				
Input/output 1				
Activation/disable delay	1 ms			
ming				
eadiness delay	450 ms			
rcle time	2.39 ms			
esponse time per beam	10 μs			
ervice interface				
ре	IO-Link			
IO-Link				
IO-Link Function	Configuration via software Service			
	Configuration via software Service 2 Piece(s)			
Function pnnection	Service			
Function Onnection Imber of connections	Service 2 Piece(s)			
Function pnnection imber of connections ug outlet	Service 2 Piece(s)			
Punction Connection unber of connections ug outlet Connection 1	Service 2 Piece(s) Axial Configuration interface Signal IN Signal OUT			
Function Connection umber of connections ug outlet Connection 1 Function	Service 2 Piece(s) Axial Configuration interface Signal IN Signal OUT Voltage supply			
Function onnection imber of connections ug outlet Connection 1 Function Type of connection	Service 2 Piece(s) Axial Configuration interface Signal IN Signal OUT Voltage supply Connector			
Function Connection Important of connections In goutlet Connection 1 Function Type of connection Thread size	Service 2 Piece(s) Axial Configuration interface Signal IN Signal OUT Voltage supply Connector M12			
Function Onnection Imber of connections ag outlet Connection 1 Function Type of connection Thread size Type	2 Piece(s) Axial Configuration interface Signal IN Signal OUT Voltage supply Connector M12 Male			
Function Innection Important of connections Ing outlet Connection 1 Function Type of connection Thread size Type Material	Service 2 Piece(s) Axial Configuration interface Signal IN Signal OUT Voltage supply Connector M12 Male Metal			
Function Connection Imper of connections Ing outlet Connection 1 Function Type of connection Thread size Type Material No. of pins	Service 2 Piece(s) Axial Configuration interface Signal IN Signal OUT Voltage supply Connector M12 Male Metal 8 -pin			
Function Connection Imber of connections Ing outlet Connection 1 Function Type of connection Thread size Type Material No. of pins Encoding	Service 2 Piece(s) Axial Configuration interface Signal IN Signal OUT Voltage supply Connector M12 Male Metal 8 -pin			
Function Innection Important of connections Ing outlet Connection 1 Function Type of connection Thread size Type Material No. of pins Encoding Connection 2	Service 2 Piece(s) Axial Configuration interface Signal IN Signal OUT Voltage supply Connector M12 Male Metal 8 -pin A-coded			
Function Connection Imber of connections ag outlet Connection 1 Function Type of connection Thread size Type Material No. of pins Encoding Connection 2 Function	Service 2 Piece(s) Axial Configuration interface Signal IN Signal OUT Voltage supply Connector M12 Male Metal 8 -pin A-coded Connection to transmitter			
Function Connection Imber of connections Ing outlet Connection 1 Function Type of connection Thread size Type Material No. of pins Encoding Connection 2 Function Type of connection	Service 2 Piece(s) Axial Configuration interface Signal IN Signal OUT Voltage supply Connector M12 Male Metal 8 -pin A-coded Connection to transmitter Connector			
Function Innection Imber of connections Ing outlet Connection 1 Function Type of connection Thread size Type Material No. of pins Encoding Connection 2 Function Type of connection Type of connection	Service 2 Piece(s) Axial Configuration interface Signal IN Signal OUT Voltage supply Connector M12 Male Metal 8 -pin A-coded Connection to transmitter Connector M12			
Function Innection Imber of connections Ing outlet Connection 1 Function Type of connection Thread size Type Material No. of pins Encoding Connection 2 Function Type of connection Thread size Type of connection	Service 2 Piece(s) Axial Configuration interface Signal IN Signal OUT Voltage supply Connector M12 Male Metal 8 -pin A-coded Connection to transmitter Connector M12 Female			

Cubic

Metal , Aluminum

29 mm x 35.4 mm x 1,195 mm

Design

Dimension (W x H x L)

Housing material



Plastic

let weight 1,300 g			
Housing color	Silver		
Type of fastening	Groove mounting Via optional mounting device		
Operation and display			
Type of display	LED OLED display		
Number of LEDs	2 Piece(s)		
Type of configuration	configuration Software Teach-in		
Operational controls	Membrane keyboard		
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

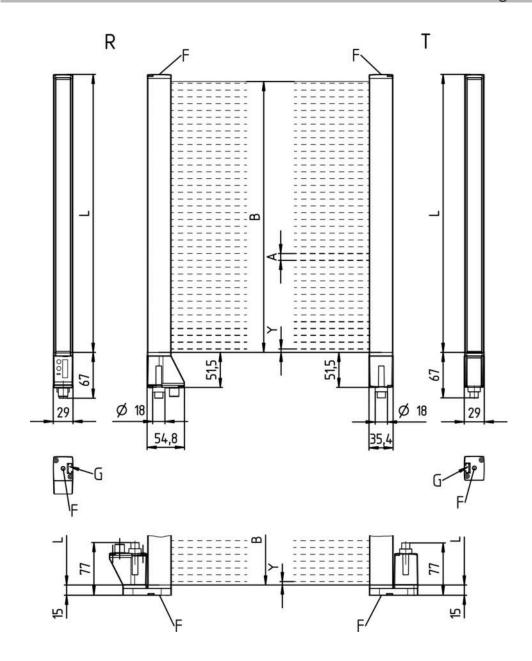
Classification	
Customs tariff number	90314990
eCl@ss 8.0	27270910
eCl@ss 9.0	27270910
ETIM 5.0	EC002549
ETIM 6.0	EC002549

Dimensioned drawings

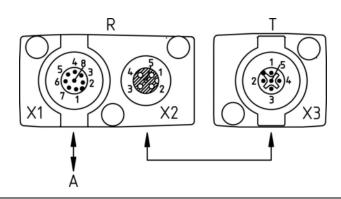
All dimensions in millimeters

Lens cover material





- 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



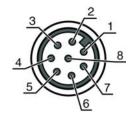


APWR / SW IN/OUT

Electrical connection

Connection 1		
Function	Configuration interface Signal IN Signal OUT Voltage supply	
Type of connection	Connector	
Thread size	M12	
Туре	Male	
Material	Metal	
No. of pins	8 -pin	
Encoding	A-coded	

Pin	Pin assignment
1	V+
2	I/O 1
3	GND
4	IO-Link
5	I/O 2
6	I/O 3
7	OUT mA / V
8	AGND



Connection 2	
Function	Connection to transmitter
Type of connection	Connector
Thread size	M12
Туре	Female
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

LEDs

LED	Display	Meaning
1	Green, continuous light	Operational readiness
	Green, flashing	Teach / error
		Measurement frequency display
2	Yellow, continuous light	Light path free, with function reserve
	Yellow, flashing	No function reserve
	Off	Object detected

Suitable transmitters

Part no.	Designation	Article	Description
50133776	CML730i- T05-1120.A-PS- M12	Light curtain transmitter	Operating range: 0.1 4.5 m Connection: Connector, M12, Axial, 5 -pin

Part number code

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

CML	Operating principle: Measuring light curtain		
7XXi	Series: 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: 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:		

A list with all available device types can be found on the Leuze electronic 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 - Connection cables

Part no.	Designation	Article	Description
50135128	KD S-M12-8A- P1-050		Connection 1: Connector, M12, Axial, Female, A-coded, 8 -pin Connection 2: Open end Shielded: Yes Cable length: 5,000 mm Sheathing material: PUR

Connection technology - Interconnection cables

Part no.	Designation	Article	Description
	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

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Mounting technology - Swivel mounts

	Part no.	Designation	Article	Description
EE.	429046	BT-2R1	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

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.