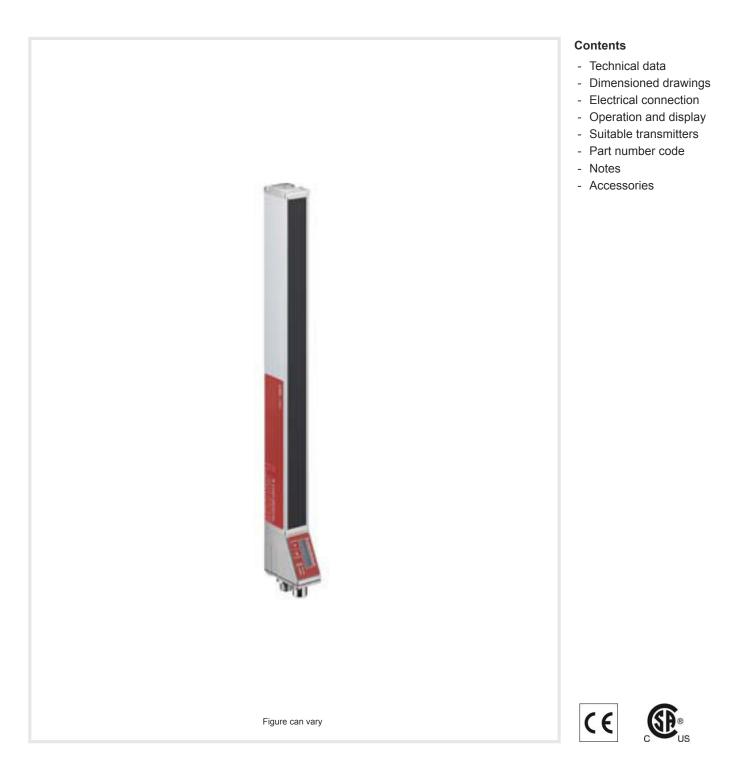


## **Technical data sheet** Light curtain receiver Part no.: 50118690 CML730i-R05-2720.A/CN-M12



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#### **Technical data**

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Series	730
Operating principle	Throughbeam principle
Device type	Receiver
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	
	Cuerenteed energing range
Operating range	Guaranteed operating range
Operating range	0.1 4.5 m 0.1 1.75 m
Operating range, transparent media	
Operating range limit	Typical operating range
Operating range limit	0.1 6 m
Measurement field length Number of beams	2,720 mm
	544 Piece(s) 5 mm
Beam spacing	J IIIII
Measurement data	
Minimum object diameter	10 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
Residual ripple	0 15 %, From U <sub>B</sub>
Open-circuit current	0 435 mA, The specified values refer to the entire package consisting of trans- mitter and receiver.
Inputs/outputs selectable	100 mA
Output current, max. Input resistance	6,000 Ω
Number of inputs/outputs selectable	
	Inputs/outputs selectable
Type Voltage type, outputs	DC
Switching voltage, outputs	
Voltage type, inputs	Typ. U <sub>B</sub> / 0 V DC
Switching voltage, inputs	bc high: ≥6V
Contening voltage, inputs	low: ≤4V
Input/output 1	
Activation/disable delay	1 ms
Timing	
Readiness delay	450 ms
Cycle time	5.59 ms
Response time per beam	10 µs
Interface	

CANopen

Service interface				
уре	IO-Link			
IO-Link				
Function	Configuration via software			
	Service			
Connection				
lumber of connections	2 Piece(s)			
Plug outlet	Axial			
Connection 1				
Function	Configuration interface			
	Connection to transmitter			
	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			
Litouting	A-toucu			
Connection 2				
Function	BUS IN			
	BUS OUT			
Type of connection	Connector			
Thread size	M12			
Туре	Female			
Material	Metal			
No. of pins	5 -pin			
Encoding	A-coded			
lechanical data				
lesign	Cubic			
Dimension (W x H x L)	,			
limension (W x H x L) lousing material	Metal			
limension (W x H x L) lousing material	,			
Dimension (W x H x L) lousing material letal housing	Metal			
Dimension (W x H x L) lousing material letal housing ens cover material	Metal Aluminum Plastic 2,750 g			
Dimension (W x H x L) Housing material Metal housing Lens cover material Het weight	Metal Aluminum Plastic			
vimension (W x H x L) lousing material letal housing ens cover material let weight lousing color	Metal Aluminum Plastic 2,750 g			
imension (W x H x L) ousing material letal housing ens cover material let weight ousing color	Metal Aluminum Plastic 2,750 g Silver			
imension (W x H x L) ousing material letal housing ens cover material et weight ousing color ype of fastening	Metal Aluminum Plastic 2,750 g Silver Groove mounting			
imension (W x H x L) ousing material letal housing ens cover material et weight ousing color ype of fastening	Metal Aluminum Plastic 2,750 g Silver Groove mounting Via optional mounting device			
Vertice of the second s	Metal Aluminum Plastic 2,750 g Silver Groove mounting			
Vertice of the second s	Metal Aluminum Plastic 2,750 g Silver Groove mounting Via optional mounting device			
Vimension (W x H x L) lousing material letal housing eens cover material let weight lousing color type of fastening Operation and display type of display	Metal Aluminum Plastic 2,750 g Silver Groove mounting Via optional mounting device			
Dimension (W x H x L) Nousing material Netal housing Lens cover material Netal housing Let weight Nousing color Type of fastening Deeration and display Type of display	Metal Aluminum Plastic 2,750 g Silver Groove mounting Via optional mounting device			
Dimension (W x H x L) Housing material Metal housing Lens cover material Het weight Housing color Type of fastening Deperation and display Type of display Humber of LEDs Type of configuration	Metal Aluminum Plastic 2,750 g Silver Groove mounting Via optional mounting device			
Dimension (W x H x L) Housing material Metal housing Lens cover material Het weight Housing color Type of fastening Deeration and display Type of display	Metal Aluminum Plastic 2,750 g Silver Groove mounting Via optional mounting device LED OLED display 2 Piece(s) Software			
Dimension (W x H x L) Housing material Metal housing Lens cover material Net weight Housing color Type of fastening Deration and display Type of display Number of LEDs Type of configuration Derational controls	Aluminum Plastic 2,750 g Silver Groove mounting Via optional mounting device LED OLED display 2 Piece(s) Software Teach-in			
Dimension (W x H x L) Housing material Metal housing Lens cover material Netal housing Lens cover material Netweight Housing color Type of fastening Deperation and display Type of display Number of LEDs Type of configuration Deperational controls Environmental data	Metal Aluminum Plastic 2,750 g Silver Groove mounting Via optional mounting device LED OLED display 2 Piece(s) Software Teach-in Membrane keyboard			
Dimension (W x H x L) Housing material Metal housing Lens cover material Net weight Housing color Type of fastening Deration and display Type of display Number of LEDs Type of configuration Derational controls	Metal Aluminum Plastic 2,750 g Silver Groove mounting Via optional mounting device LED OLED display 2 Piece(s) Software Teach-in			

### **Technical data**

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#### Certifications

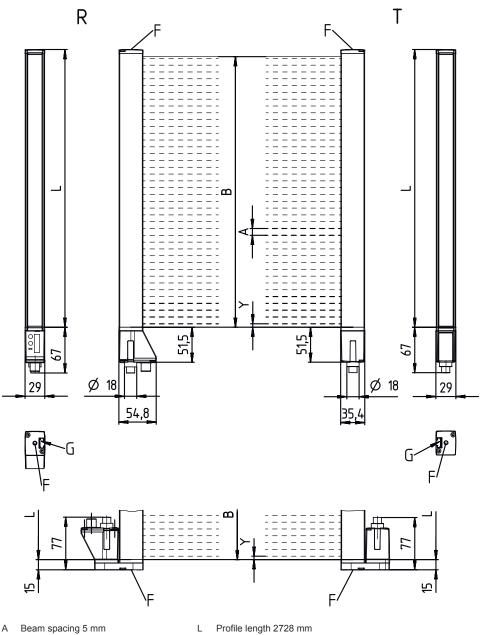
Degree of protection	IP 65
Protection class	III
Certifications	c CSA US
Standards applied	IEC 60947-5-2

#### Classification

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

#### **Dimensioned drawings**

All dimensions in millimeters



Beam spacing 5 mm А

Fastening groove

- В Measurement field length 2720 mm
- F M6 thread

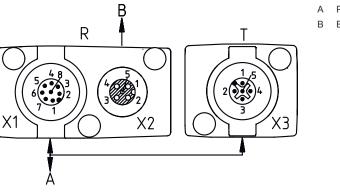
G

- Transmitter Т
- R Receiver
- 2.5 mm Υ

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#### **Dimensioned drawings**





A PWR / SW IN / OUTB BUS IN / OUT

### **Electrical connection**

**Connection 1** 

Function	Configuration interface
Function	, C
	Connection to transmitter
	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	RS 485 Tx-		
7	RS 485 Tx+		
8	FE/SHIELD		



Function	BUS IN
	BUS OUT
Type of connection	Connector
Thread size	M12
Туре	Female
Material	Metal
No. of pins	5 -pin
Encoding	A-coded



### **Electrical connection**

Pin	Pin assignment	
	FE/SHIELD	
	n.c.	
	CAN GND	
	CAN H	
5	CAN L	

### **Operation and display**

LED	Display	Meaning
1	Green, continuous light	Operational readiness
	Green, flashing	Teach / error
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
50118609	CML730i-T05- 2720.A-M12	Light curtain transmitter	Operating range: 0.1 4 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
Y	Device type T: transmitter R: receiver
22	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

#### 6/9

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#### Part number code



DDD	Special equipment -PS: Power Setting
EEE	Electrical connection M12: M12 connector
FFF	-EX: Explosion protection
	Note
A	∜ A list with all available device types can be found on the Leuze website at www.leuze.com.

#### Notes

Observe intended use!
<ul> <li>This product is not a safety sensor and is not intended as personnel protection.</li> <li>The product may only be put into operation by competent persons.</li> <li>Only use the product in accordance with its intended use.</li> </ul>



#### 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
50132079	KD U-M12-5A-V1- 050	Connection cable	Connection 1: Connector, M12, Axial, Female, A-coded, 5 -pin Connection 2: Open end Shielded: No Cable length: 5,000 mm Sheathing material: PVC

#### 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

#### Accessories

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## Connection technology - Y distribution cables

	Part no.	Designation	Article	Description
	50118183	K-Y1 M12A-5m- M12A-S-PUR	Interconnection cable	Connection 1: Connector, M12, Axial, Female, A-coded, 5 -pin Connection 2: Connector, M12, Axial, Male, A-coded, 5 -pin Connection 3: Connector, M12, Axial, Female, A-coded, 8 -pin Shielded: Yes Cable length fork 1: 5,000 mm Cable length fork 2: 150 mm Sheathing material: PUR
	50118185	K-YCN M12A-M12A- S-PUR	Interconnection cable	Suitable for interface: CANopen Connection 1: Connector, M12, Axial, Male, A-coded, 5 -pin Connection 2: Connector, M12, Axial, Female, A-coded, 5 -pin Connection 3: Connector, M12, Axial, Male, A-coded, 5 -pin Shielded: Yes Cable length fork 1: 250 mm Cable length fork 2: 350 mm Sheathing material: PUR

#### Connection technology - Terminating resistors

 Part no.	Designation	Article	Description
50040099	TS 01-5-SA	Terminator plug	Suitable for: DeviceNet, CANopen Connection 1: Connector, M12, Axial, Male, A-coded, 5 -pin Function: Bus termination

#### 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
RR.	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.

#### Accessories

## Leuze

 Part no.	Designation	Article	Description
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
6	<sup>t</sup> 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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 We reserve the right to make technical changes

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