

Technical data sheet Light curtain receiver Part no.: 50123484 CML720i-R10-1120.A/D3-M12



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Technical data

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Series	720
Operating principle	Throughbeam principle
Device type	Receiver
Contains	2x BT-NC sliding block
Application	Object measurement
Special version	
Special version	Crossed-beam scanning
	Diagonal-beam scanning
	Parallel-beam scanning
Optical data	
Operating range	0.3 7 m
Operating range	Guaranteed operating range
Operating range limit	0.2 9 m
Operating range limit	Typical operating range
Measurement field length	1,120 mm
Number of beams	112 Piece(s)
Beam spacing	10 mm
Measurement data	
Minimum object diameter	20 mm
Electrical data	
	Delerity reversel protection
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 trans mitter and receiver.
Inputs/outputs selectable	100
Output current, max.	100 mA
Input resistance	6,000 Ω
Number of inputs/outputs selectable	2 Piece(s) Inputs/outputs selectable
Type Voltage type, outputs	DC
Switching voltage, outputs	Typ. U _B / 0 V
Switching voltage, inputs	high: ≥6V
emioning voltage, inputs	$ ow \le 4 V$
Input/output 1	
Activation/disable delay	1 ms
Time behavior	
Time behavior	3 76 ms
Cycle time	3.76 ms
Cycle time Response time per beam	3.76 ms 30 μs
Cycle time Response time per beam Interface	30 µs
Cycle time Response time per beam	
Cycle time Response time per beam Interface	30 µs

Service in	terface	
Туре		IO-Link
IO-Link		
Function		Configuration via software
		Service
Connectio	n	
Number of	connections	2 Piece(s)
Plug outlet		Axial
Connec Function		Configuration interface
Function		Connection to transmitter
		Signal IN
		Signal OUT
Tune of a	ennetien	Voltage supply
	connection	Connector
Thread s	ize	M12 Male
Type		indio
Material		Metal
No. of pi		8 -pin
Encoding	9	A-coded
Connec	tion 2	
Function		BUS IN
Tunction		BUS OUT
Type of c	onnection	Connector
Thread s		M12
Type	126	Female
Material		Metal
No. of pi	ne	5 -pin
Encoding		B-coded
Linoballi	9	2 00000
Mechanic	al data	
Design		Cubic
Dimension	(W x H x L)	29 mm x 35.4 mm x 1,195 mm
Housing ma	aterial	Metal
Metal hous	ng	Aluminum
Lens cover	material	Plastic
Net weight		1,300 g
Housing co	lor	Silver
Type of fast	tening	Groove mounting
		Via optional mounting device
Operation	and display	
Type of dis	olay	LED
21	-	OLED display
Number of	LEDs	2 Piece(s)
Type of cor		Software
21	u	Teach-in
Operationa	l controls	Membrane keyboard
Environm		,
		20 60 °C
	nperature, operation	-30 60 °C
a moiont to	nperature, storage	-40 70 °C

Technical data

Certifications

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

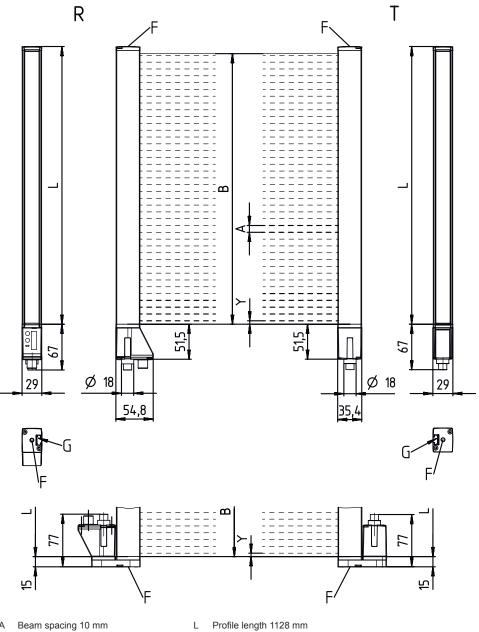
Classification

Customs tariff number	90314990
ECLASS 5.1.4	27270910
ECLASS 8.0	27270910
ECLASS 9.0	27270910
ECLASS 10.0	27270910
ECLASS 11.0	27270910
ECLASS 12.0	27270910
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

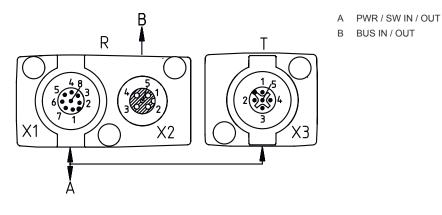


- А
- В Measurement field length 1120 mm
- F M6 thread G
 - Fastening groove
- Т
 - Transmitter
- R Receiver
- Υ 5 mm

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Dimensioned drawings





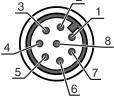
Electrical connection

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

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		



Connection 2

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

Electrical connection

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
50119411	CML720i-T10- 1120.A-M12	Light curtain transmitter	Operating range: 0.3 7 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: 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

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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!
 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
50132079	KD U-M12-5A-V1- 050	Connection cable	Connection 1: Connector, M12, Axial, Female, A-coded, 5 -pin Connector, LED: No Connection 2: Open end Shielded: No Cable length: 5.000 mm Sheathing material: PVC

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

Accessories

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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

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