

Technical data sheet Light curtain receiver Part no.: 50122885 CML720i-R05-1200.A/PB-M12



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 changes

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Technical data

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720
Throughbeam principle Receiver
2x BT-NC sliding block
Object measurement
Crossed-beam scanning
Diagonal-beam scanning
Parallel-beam scanning
0.1 3.5 m
Guaranteed operating range
0.1 4.5 m
Typical operating range
1,200 mm
240 Piece(s)
5 mm
-
10 mm
Polarity reversal protection
Short circuit protected
Transient protection
18 30 V, DC
0 15 %, From U _B
0 270 mA, The specified values refer to the entire package consisting of trans- mitter and receiver.
100 1
100 mA
0 000 0
6,000 Ω
2 Piece(s)
2 Piece(s) Inputs/outputs selectable
2 Piece(s) Inputs/outputs selectable DC
2 Piece(s) Inputs/outputs selectable DC Typ. U _B / 0 V
2 Piece(s) Inputs/outputs selectable DC Typ. U _B / 0 V DC
2 Piece(s) Inputs/outputs selectable DC Typ. $U_B / 0 V$ DC high: $\geq 6V$
2 Piece(s) Inputs/outputs selectable DC Typ. U _B / 0 V DC
2 Piece(s) Inputs/outputs selectable DC Typ. $U_B / 0 V$ DC high: $\geq 6V$
2 Piece(s) Inputs/outputs selectable DC Typ. $U_B / 0 V$ DC high: $\geq 6V$ low: $\leq 4 V$
2 Piece(s) Inputs/outputs selectable DC Typ. $U_B / 0 V$ DC high: $\geq 6V$
2 Piece(s) Inputs/outputs selectable DC Typ. $U_B / 0 V$ DC high: $\geq 6V$ low: $\leq 4 V$
2 Piece(s) Inputs/outputs selectable DC Typ. $U_B / 0 V$ DC high: $\geq 6V$ low: $\leq 4 V$
2 Piece(s) Inputs/outputs selectable DC Typ. $U_B / 0 V$ DC high: $\geq 6V$ low: $\leq 4 V$ 1 ms
2 Piece(s) Inputs/outputs selectable DC Typ. $U_B / 0 V$ DC high: $\geq 6V$ low: $\leq 4 V$ 1 ms 7.6 ms
2 Piece(s) Inputs/outputs selectable DC Typ. $U_B / 0 V$ DC high: $\geq 6V$ low: $\leq 4 V$ 1 ms 7.6 ms
2 Piece(s) Inputs/outputs selectable DC Typ. $U_B / 0 V$ DC high: $\geq 6V$ low: $\leq 4 V$ 1 ms 7.6 ms 30 μ s
2 Piece(s) Inputs/outputs selectable DC Typ. $U_B / 0 V$ DC high: $\geq 6V$ low: $\leq 4 V$ 1 ms 7.6 ms 30 μ s

S	Service interface				
Туре		IO-Link			
	IO-Link				
	Function	Configuration via software Service			
С	onnection				
N	umber of connections	2 Piece(s)			
PI	ug outlet	Axial			
	Connection 1				
	Function	Configuration interface Connection to transmitter			
		Signal IN			
		Signal OUT			
		Voltage supply			
	Type of connection	Connector			
	Thread size	M12			
	Type	Male			
	Material	Metal			
	No. of pins	8 -pin			
	Encoding	A-coded			
	Ū				
	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			
Μ	echanical data				
De	esign	Cubic			
Di	mension (W x H x L)	29 mm x 35.4 mm x 1,275 mm			
	ousing material	Metal			
	etal housing	Aluminum			
	ens cover material	Plastic			
	et weight ousing color	1,350 g Silver			
	pe of fastening	Groove mounting			
''	pe or rasiening	Via optional mounting device			
Operation and display					
Ту	pe of display	LED			
		OLED display			
	umber of LEDs	2 Piece(s)			
Ту	pe of configuration	Software			
		Teach-in			
0	perational controls	Membrane keyboard			
E	nvironmental data				
A	nbient temperature, operation	-30 60 °C			
A	nbient temperature, 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

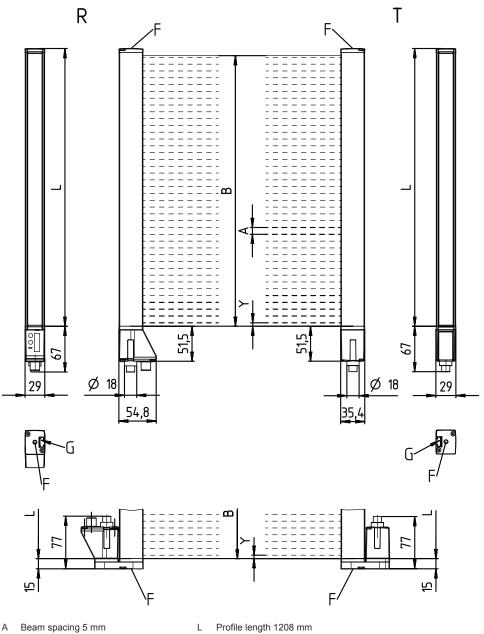
Classification

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



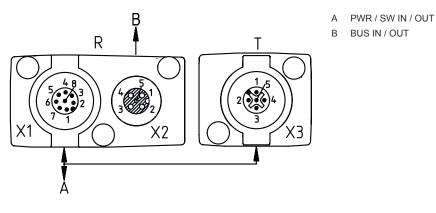
- Beam spacing 5 mm А
- В Measurement field length 1200 mm
- F M6 thread G Fastening groove
- Transmitter Т
- R Receiver
- 2.5 mm Υ

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Dimensioned drawings





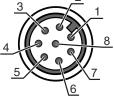
Electrical connection

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

Pin Pin assignment 1 V+ 2 Tx 3 PB GND 4 Tx+ 5 FE/SHIELD

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
50119382	CML720i-T05- 1200.A-M12	Light curtain transmitter	Operating range: 0.1 3.5 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
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



Part number code



DDD	Special equipment -PS: Power Setting
EEE	Electrical connection M12: M12 connector
FFF	-EX: Explosion protection
	Note
	to 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

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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

Configuration devices

Accessories

 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.
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

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