

Technical data sheet Light curtain receiver Part no.: 50123483 CML720i-R10-960.A/D3-M12



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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
Guaranteed operating range
0.3 7 m
Typical operating range
0.2 9 m
960 mm
96 Piece(s)
10 mm
20 mm
Referit and a start of the
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
100 mA
$6,000 \Omega$
e 2 Piece(s)
e 2 Piece(s) Inputs/outputs selectable
 Piece(s) Inputs/outputs selectable DC
 Piece(s) Inputs/outputs selectable DC Typ. U_B / 0 V
 Piece(s) Inputs/outputs selectable DC Typ. U_B / 0 V high: ≥6V
 Piece(s) Inputs/outputs selectable DC Typ. U_B / 0 V
 Piece(s) Inputs/outputs selectable DC Typ. U_B / 0 V high: ≥6V
 Piece(s) Inputs/outputs selectable DC Typ. U_B / 0 V high: ≥6V
a 2 Piece(s) Inputs/outputs selectable DC Typ. $U_B / 0 V$ high: ≥6V Iow: ≤4V
2 Piece(s) Inputs/outputs selectable DC Typ. U _B / 0 V high: ≥6V Iow: ≤4V 1 ms
a 2 Piece(s) Inputs/outputs selectable DC Typ. U _B / 0 V high: ≥6V Iow: ≤4V 1 ms 3.28 ms
a 2 Piece(s) Inputs/outputs selectable DC Typ. U _B / 0 V high: ≥6V Iow: ≤4V
a 2 Piece(s) Inputs/outputs selectable DC Typ. $U_B / 0 \vee$ high: $\geq 6 \vee$ Iow: $\leq 4 \vee$ 1 ms 3.28 ms 30 μ s
a 2 Piece(s) Inputs/outputs selectable DC Typ. U _B / 0 V high: ≥6V Iow: ≤4V 1 ms 3.28 ms
a 2 Piece(s) Inputs/outputs selectable DC Typ. $U_B / 0 V$ high: $\geq 6V$ Iow: $\leq 4V$ 1 ms 3.28 ms 30 μ s

pe	IO-Link
IO-Link	
Function	Configuration via software Service
	Service
onnection	
umber of connections	2 Piece(s)
ug 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
•	
Connection 2	
Function	BUS IN BUS OUT
Type of connection	Connector
Type of connection Thread size	M12
Type	Female
Material	Metal
No. of pins	5 -pin
Encoding	B-coded
u u u u u u u u u u u u u u u u u u u	
echanical data	
sign	Cubic
mension (W x H x L)	29 mm x 35.4 mm x 1,035 mm
ousing material	Metal
etal housing	Aluminum
ens cover material	Plastic
et weight	1,150 g
ousing color	Silver
pe of fastening	Groove mounting
	Via optional mounting device
peration and display	
pe of display	LED
	OLED display
umber of LEDs	2 Piece(s)
pe of configuration	Software
	Teach-in
perational controls	Membrane keyboard
nvironmental data	
iviruliileillai udla	
nbient temperature, operation	-30 60 °C

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Certifications

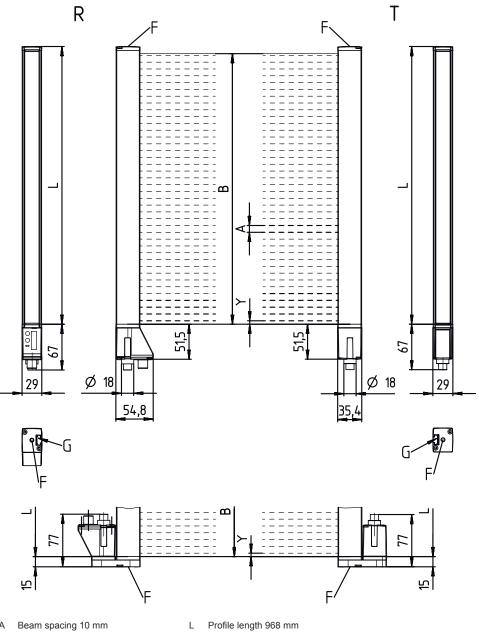
Degree of protection	IP 65
Protection class	III
Certifications	c CSA US
Standards applied	IEC 60947-5-2

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
Cl@ss 10.0 Cl@ss 11.0 FIM 5.0 FIM 6.0	27270910 27270910 EC002549 EC002549

Dimensioned drawings

All dimensions in millimeters



Beam spacing 10 mm А

Fastening groove

- В Measurement field length 960 mm
- F M6 thread

G

R Receiver

Т

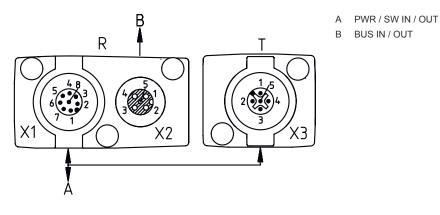
Υ 5 mm

Transmitter

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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

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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
50119410	CML720i-T10-960.A- M12	Light curtain transmitter	Operating range: 0.3 6 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
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



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Part number code



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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 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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	Part no.	Designation	Article	Description
	50123265	K-YPB M12A-5m- M12A-S-PUR	Interconnection cable	Suitable for interface: PROFIBUS DP Connection 1: Connector, M12, Axial, Male, B-coded, 5 -pin Connection 2: Cable with connector, M12, Axial, Female, B-coded, 5 -pin Connection 3: Cable with connector, M12, Axial, Male, B-coded, 5 -pin Shielded: Yes Sheathing material: PUR

Mounting technology - Mounting brackets

	Part no.	Designation	Article	Description
1.1. 1.1	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
ęę.	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
y;	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

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