

Technical data sheet Light curtain receiver Part no.: 50119754 CML720i-R10-480.A/L-M12



The Sensor People In der Braike 1, 73277 Owen

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Technical data

Device type Receiver Contains 2x BT-NC sliding block Application Object measurement Special version Crossed-beam scanning Diagonal-beam scanning Parallel-beam scanning Operating range Guaranteed operating range Operating range limit 7 m Operating range limit 0.3 7 m Operating range limit 0.2 9 m Measurement field length 480 mm Number of beams 48 Piece(s) Beam spacing 10 mm Measurement field langth 50 mm Measurement field langth 480 mm Number of beams 48 Piece(s) Beam spacing 10 mm Measurement data Polarity reversal protection Short circuit protected Transient protection Performance data Supply voltage Ug Supply voltage Ug 18 30 V, DC Residual ripple 0 15 %, From Ug Open-circuit current 0 46 mA, The specified values refer to the entire package consisting of tran mitter and receiver. Type Inputs/outputs selectab	Series	720		
Device type Receiver Contains 2x BT-NC sliding block Application Object measurement Special version Crossed-beam scanning Diagonal-beam scanning Parallel-beam scanning Operating range Ouranteed operating range Operating range limit Cycical data Operating range O.3 7 m Operating range limit C.2 9 m Measurement field length 480 mm Number of beams 48 Piece(s) Beam spacing 10 mm Measurement data Minimum object diameter Z0 mm Electrical data Performance data Short circuit protected Transient protection Short circuit current 0 15 %, From U _B Open-circuit current 0 15 %, From U _B Open-circuit current 0 165 mA, The specified values refer to the entire package consisting of tran mitter and receiver. Inputs/outputs selectable Output current, max. 100 mA Inputs/outputs selectable O Switching voltage up, outputs C Switching voltage, inputs DC <	Operating principle	Throughbeam principle		
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Readiness delay 400 ms Cycle time 1.84 ms Response time per beam 30 µs	-			
Cycle time 1.84 ms Response time per beam 30 μs	Timing			
Response time per beam 30 µs	Readiness delay			
Interface	•			
	Response time per beam	30 µs		
Type IO-I ink	Interface			
	Type	IQ-I ink		

	IO-Link COM mode	COM2
	Specification	V1.0.1
	opeometation	V1.1
	Min. cycle time	COM2 = 2.3 ms
		00WZ - 2.0 M3
S	ervice interface	
Т	/pe	IO-Link
ر.	,pe	
	IO-Link	
	Function	Configuration via software
		Service
С	onnection	
N	umber of connections	2 Piece(s)
PI	ug outlet	Axial
	Connection 1	Configuration interferen
	Function	Configuration interface
		Signal IN
	The second se	Voltage supply
	Type of connection	Connector M12
	Thread size	
	Type	Male
	Material	Metal
	No. of pins Encoding	8 -pin A-coded
	Encouning	A-coded
	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
M	echanical data	
D	esign	Cubic
Di	imension (W x H x L)	29 mm x 35.4 mm x 555 mm
H	ousing material	Metal
	etal housing	Aluminum
Le	ens cover material	Plastic
	et weight	700 g
	ousing color	Silver
Ту	/pe of fastening	Groove mounting
		Via optional mounting device
0	peration and display	
-		152
1)	/pe of display	
		OLED display
	umber of LEDs	2 Piece(s)
Ŋ	pe of configuration	Software
~	norational controls	Teach-in
0	perational controls	Membrane keyboard
Е	nvironmental data	
٨	mbient temperature, operation	-30 60 °C
	mbient temperature, storage	-40 70 °C
~		

Technical data

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Certifications

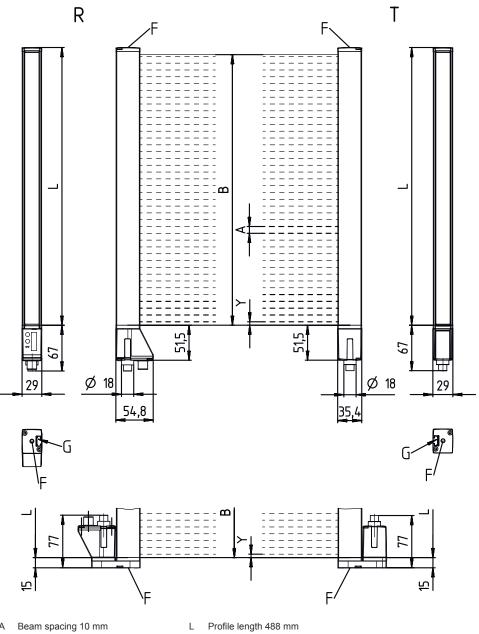
Degree of protection	IP 65
Protection class	III
Certifications	c CSA US
Standards applied	IEC 60947-5-2

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 10 mm А

Fastening groove

- В Measurement field length 480 mm
- F M6 thread

G

R Receiver

Т

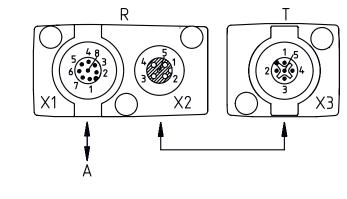
Υ 5 mm

Transmitter



Dimensioned drawings





A PWR / SW IN / OUT

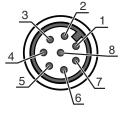
Electrical connection

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	IO1	
3	GND	
4	IO-Link	
5	IO2	
6	IO3	
7	IO4	
8	GND	



Connection 2

Connection to transmitter
Connector
M12
Female
Metal
5 -pin
A-coded

Pin Pin assignment

1	FE/SHIELD
2	V+
3	GND
4	RS 485 Tx+
5	RS 485 Tx-



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
50119407	CML720i-T10-480.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
DDD	Special equipment -PS: Power Setting
EEE	Electrical connection M12: M12 connector
FFF	-EX: Explosion protection
Note	
A list wi	th 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.

 ${\ensuremath{\,\textcircled{\tiny \ensuremath{\,\Downarrow}}}}$ The product may only be put into operation by competent persons.

 $\ensuremath{^{\ensuremath{\Downarrow}}}$ Only use the product in accordance with its intended use.

	For UL applications:
A	 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 cable	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
	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

Mounting technology - Mounting brackets

	Part no.	Designation	Article	Description
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

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Accessories



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

Configuration devices

 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
с. С.	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	the 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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