

Technical data sheet Light curtain receiver Part no.: 50123325 CML730i-R10-2880.A/D3-M12



The Sensor People In der Braike 1, 73277 Owen

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We reserve the right to make technical changes eng • 2020-12-21

Technical data

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Basic data

Operating principle Throughbeam principle Device type Receiver Contains 2x BT-NC silding block Application Detection of transparent objects Object measurement Object measurement Special version Crossed-beam scanning Diagonal-beam scanning Diagonal-beam scanning Operating range Outaranteed operating range Operating range, transparent media 0.3 9.5 m Operating range limit 0.2 12 m Measurement field length 2.880 mm Number of beams 288 Picce(s) Beam spacing 10 mm Measurement field length 2.880 mm Number of beams 288 Picce(s) Beam spacing 10 mm Measurement data Short circuit protected Transient protection Short circuit protected Short circuit protected Transient protection Performance data Short circuit protected Supply voltage Ug 18 30 V, DC Residual ripple 0 15 %, From Ug Open-circuit current 600 m, The specified	Basic data	
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Cycle time 3.03 ms Response time per beam 10 μs Interface Type RS 485 RS 485 Function Process	Input/output 1	
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Response time per beam 10 µs Interface Type RS 485 Modbus RS 485 Function Process	Cycle time	3.03 ms
Type RS 485 Modbus RS 485 Function Process Service interface	Response time per beam	10 µs
RS 485 Function Process Service interface	Interface	
Function Process Service interface	Туре	RS 485 Modbus
Function Process Service interface	RS 485	
		Process
Type IO-Link	Service interface	
	Туре	IO-Link

IO-Link Function	Configuration via software
	Service
onnection	
lumber of connections	2 Piece(s)
lug 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
Thread size	M12
Туре	Female
Material	Metal
No. of pins	5 -pin
Encoding	B-coded
lechanical data	
lesian	Cubic
Design	
Dimension (W x H x L)	29 mm x 35.4 mm x 2,955 mm Metal
lousing material	Aluminum
Aetal housing	
ens cover material	Plastic
let weight	2,900 g
lousing color	Silver
Type of fastening	Groove mounting
	Via optional mounting device
Dperation and display	
īype of display	LED
	OLED display
Number of LEDs	2 Piece(s)
	Software
ype of configuration	Software Teach-in
ype of configuration	Software
Type of configuration Dperational controls	Software Teach-in Membrane keyboard
Type of configuration Dperational controls Environmental data	Software Teach-in
Type of configuration Operational controls Environmental data Ambient temperature, operation	Software Teach-in Membrane keyboard
Number of LEDs Type of configuration Operational controls Environmental data Ambient temperature, operation Ambient temperature, storage Certifications	Software Teach-in Membrane keyboard -30 60 °C
Type of configuration Operational controls Environmental data Ambient temperature, operation Ambient temperature, storage	Software Teach-in Membrane keyboard -30 60 °C
Type of configuration Operational controls Environmental data Ambient temperature, operation Ambient temperature, storage Certifications Degree of protection	Software Teach-in Membrane keyboard -30 60 °C -40 70 °C IP 65
Type of configuration Operational controls Environmental data Ambient temperature, operation Ambient temperature, storage	Software Teach-in Membrane keyboard -30 60 °C -40 70 °C

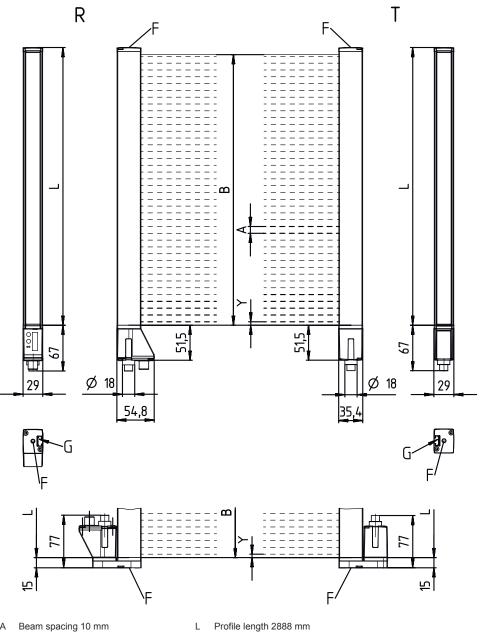
Technical data

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 2880 mm
- F M6 thread

G

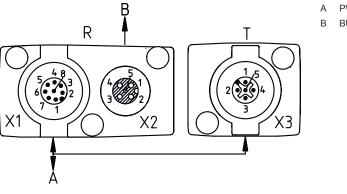
- Transmitter Т
- R Receiver
- 5 mm Υ

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Dimensioned drawings





PWR / SW IN / OUT BUS IN / OUT

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		



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

1 2

3

4

5

Pin Pin assignment V+ Tx-PB GND Tx+ FE/SHIELD



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
50118628	CML730i-T10- 2880.A-M12	Light curtain transmitter	Operating range: 0.3 9.5 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: 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



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