Technical data sheet Light curtain transmitter Part no.: 50118624 CML730i-T10-2240.A-M12



Leuze

The Sensor People In der Braike 1, 73277 Owen

Leuze electronic GmbH + Co. KG info@leuze.com • www.leuze.com

Phone: +49 7021 573-0 • Fax: +49 7021 573-199

We reserve the right to make technical changes eng • 2020-12-18

Technical data

Leuze

Series	730	
Operating principle	Throughbeam principle	
Device type	Transmitter	
Contains	2x BT-NC sliding block	
Application	Detection of transparent objects	
	Object measurement	
Special version		
Special version	Crossed-beam scanning	
	Diagonal-beam scanning	
	Parallel-beam scanning	
Optical data		
Operating range	Guaranteed operating range	
Operating range	0.3 9.5 m	
Operating range, transparent media	0.3 3.5 m	
Operating range limit	Typical operating range	
Operating range limit	0.2 12 m	
Measurement field length	2,240 mm	
Number of beams	224 Piece(s)	
Beam spacing	10 mm	
Light source	LED, Infrared	
LED light wavelength	940 nm	
Measurement data		
Minimum object diameter	20 mm	
Electrical data		
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	0 435 mA, The specified values refer to the entire package consisting of trans mitter and receiver.	
Timing		
	450 ms	
Readiness delay		
Readiness delay Cycle time	2.44 ms	
•	2.44 ms	
Cycle time	2.44 ms 1 Piece(s)	

Connection 1			
Function	Connection to receiver		
Type of connection	Connector		
Thread size	M12		
Туре	Male		
Material	Metal		
No. of pins	5 -pin		
Encoding	A-coded		

Mechanical data

Design	Cubic
Dimension (W x H x L)	29 mm x 35.4 mm x 2,315 mm
Housing material	Metal
Metal housing	Aluminum
Lens cover material	Plastic
Net weight	2,250 g
Housing color	Silver
Type of fastening	Groove mounting
	Via optional mounting device

Operation and display

Type of display	LED
Number of LEDs	1 Piece(s)

Environmental data

Ambient temperature, operation	-30 60 °C
Ambient temperature, storage	-40 70 °C

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	

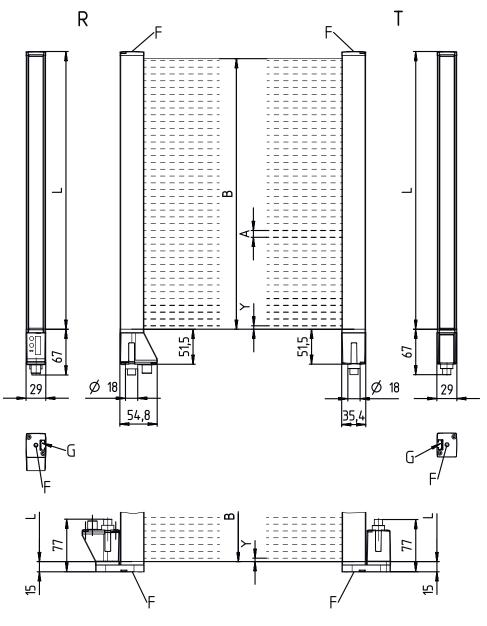
The Sensor People In der Braike 1, 73277 Owen

Leuze electronic GmbH + Co. KG info@leuze.com • www.leuze.com Phone: +49 7021 573-0 • Fax: +49 7021 573-199 eng • 2020-12-18

We reserve the right to make technical changes

Dimensioned drawings

All dimensions in millimeters



Beam spacing 10 mm А

- В Measurement field length 2240 mm
- F M6 thread
- G Fastening groove
- Profile length 2248 mm L Т
- Transmitter
- R Receiver
- 5 mm Υ





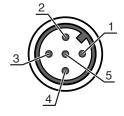
Electrical connection

Leuze

Connection 1

Function	Connection to receiver
Type of connection	Connector
Thread size	M12
Туре	Male
Material	Metal
No. of pins	5 -pin
Encoding	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	Continuous mode
	Off	No communication with the receiver / waiting for trigger
	green, flashing in sync with the measurement	Measurement frequency display

Suitable receivers

Suitable it	Part no.	Designation	Article	Description
	50118705	CML730i-R10- 2240.A/CN-M12	Light curtain receiver	Operating range: 0.3 9.5 m Interface: CANopen Connection: Connector, M12, Axial, 8 -pin
	50118881	CML730i-R10- 2240.A/CV-M12	Light curtain receiver	Operating range: 0.3 9.5 m Analog outputs: 2 Piece(s), Voltage, Current Connection: Connector, M12, Axial, 8 -pin
	50123321	CML730i-R10- 2240.A/D3-M12	Light curtain receiver	Operating range: 0.3 9.5 m Interface: RS 485 Modbus Connection: Connector, M12, Axial, 8 -pin
	50118787	CML730i-R10- 2240.A/L-M12	Light curtain receiver	Operating range: 0.3 9.5 m Interface: IO-Link Connection: Connector, M12, Axial, 8 -pin

Suitable receivers

Leuze

	Part no.	Designation	Article	Description
Į	50123154	CML730i-R10- 2240.A/PB-M12	Light curtain receiver	Operating range: 0.3 9.5 m Interface: PROFIBUS DP Connection: Connector, M12, Axial, 8 -pin
ļ	50131768	CML730i-R10- 2240.A/PN-M12	Light curtain receiver	Operating range: 0.3 9.5 m Interface: PROFINET Connection: Connector, M12, Axial, 8 -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 v	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.

 ${\ensuremath{\,\textcircled{\tiny \ensuremath{\,\Downarrow}}}}$ 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:
9	 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 - 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. 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
ęł.	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

Leuze

Accessories

Leuze

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