Technical data sheet Light curtain transmitter Part no.: 50118646 CML730i-T20-2870.A-M12



Leuze

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We reserve the right to make technical

Technical data

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Basic data

Plug outlet	Axial
Number of connections	1 Piece(s)
Connection	
Cycle time	1.64 ms
Readiness delay	450 ms
Time behavior	
Open-circuit current	0 435 mA, The specified values refer to the entire package consisting of trans- mitter and receiver.
Residual ripple	0 15 %, From U _B
Supply voltage U _B	18 30 V, DC
Performance data	
	Transient protection
	Short circuit protected
Protective circuit	Polarity reversal protection
Electrical data	
Minimum object diameter	30 mm
Measurement data	
Wavelength	940 nm
Light source	LED, Infrared
Beam spacing	20 mm
Number of beams	144 Piece(s)
Measurement field length	2,870 mm
Operating range limit	Typical operating range
Operating range limit	0.2 12 m
Operating range, transparent media	0.3 3.5 m
Operating range	Guaranteed operating range
Operating range	0.3 9.5 m
Optical data	
	Parallel-beam scanning
	Diagonal-beam scanning
Special version	Crossed-beam scanning
Special version	
	Object measurement
Application	Detection of transparent objects
Contains	2x BT-NC sliding block
Device type	Transmitter
Operating principle	Throughbeam principle

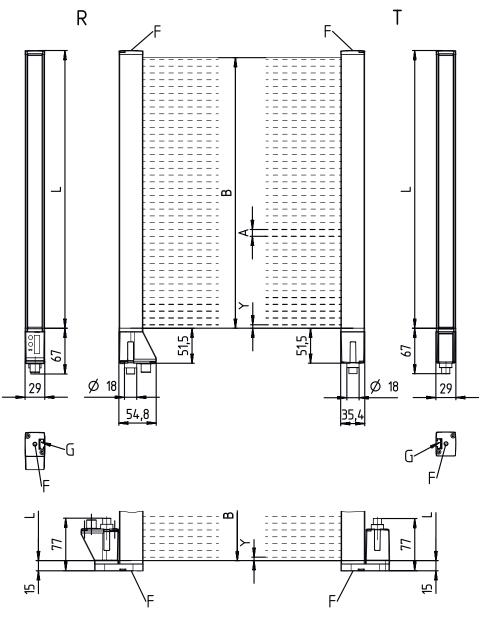
Connection 1	
Function	Connection to receiver
Type of connection	Connector
Thread size	M12
Туре	Male
Material	Metal
No. of pins	5 -pin
Encoding	A-coded

Mechanical data

Design	Cubic
Dimension (W x H x L)	29 mm x 35.4 mm x 2,955 mm
Housing material	Metal
Metal housing	Aluminum
Lens cover material	Plastic
Net weight	2,850 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
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 20 mm А
- В Measurement field length 2870 mm
- F M6 thread
- G Fastening groove
- Profile length 2888 mm L Т
 - Transmitter Receiver
- R
- 5 mm Υ





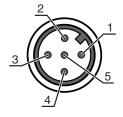
Electrical connection

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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

Sullable receivers					
	Part no.	Designation	Article	Description	
	50118728	CML730i-R20- 2870.A/CN-M12	Light curtain receiver	Operating range: 0.3 9.5 m Interface: CANopen Connection: Connector, M12, Axial, 8 -pin	
	50118903	CML730i-R20- 2870.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	
	50123343	CML730i-R20- 2870.A/D3-M12	Light curtain receiver	Operating range: 0.3 9.5 m Interface: RS 485 Modbus Connection: Connector, M12, Axial, 8 -pin	
	50118809	CML730i-R20- 2870.A/L-M12	Light curtain receiver	Operating range: 0.3 9.5 m Interface: IO-Link Connection: Connector, M12, Axial, 8 -pin	

Suitable receivers

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	Part no.	Designation	Article	Description
Į	50123202	CML730i-R20- 2870.A/PB-M12	Light curtain receiver	Operating range: 0.3 9.5 m Interface: PROFIBUS DP Connection: Connector, M12, Axial, 8 -pin
Į	50131812	CML730i-R20- 2870.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
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
DDD	Special equipment -PS: Power Setting
EEE	Electrical connection M12: M12 connector
FFF	-EX: Explosion protection
Note	
A list w	ith 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.

 $\ensuremath{^{\ensuremath{\Downarrow}}}$ 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:	
	✤ For UL applications, use is only permitted in Class 2 circuits in accordance with the NEC (National Electric Code).	
Ĭ,	Shee proximity switches shall be used with UL Listed Cable assemblies rated 30V, 0.5A min, in the field installation, or equivalent (categories: C CYJV7 or PVVA/PVVA7)	YJV/

Accessories

Connection technology - Interconnection cables

	Part no.	Designation	Article	Description
	50129781	KDS DN-M12-5A- M12-5A-P3-050	Interconnection cable	Suitable for interface: 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
	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
P.G.	429393	BT-2HF	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
165	50121098	SET MD12-US2-IL1.1 + Zub.	Diagnostics set	Interface: USB Connections: 2 Piece(s) Degree of protection: IP 20

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Accessories

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