SMART
SENSOR
BUSINESS

▲ **Leuze electronic**

the sensor people

Part no.: 50127805
CML720i-T10-2380.A-M12-EX
Light curtain transmitter

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Figure can vary

Contents

- Technical data
- Dimensioned drawings
- Electrical connection
- Operation and display
- Suitable receivers
- Part number code
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Technical data

Basic data	
Series	720
Operating principle	Throughbeam principle
Device type	Transmitter
Contains	2x BT-NC sliding block
Application	Object measurement

Special design	
Special design	Crossed-beam scanning Diagonal-beam scanning Ex-protected Parallel-beam scanning

Optical data	
Operating range	Guaranteed operating range
Operating range	0.3 ... 7 m
Operating range limit	Typical operating range
Operating range limit	0.2 ... 9 m
Measurement field length	2,380 mm
Number of beams	238 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 transmitter and receiver.

Timing	
Readiness delay	450 ms
Cycle time	7.6 ms

Connection	
Number of connections	1 Piece(s)
Plug outlet	Axial

Leuze electronic GmbH + Co. KG, In der Braike 1, 73277 Owen
Phone: +49 7021 573-0, Fax: +49 7021 573-199

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

Mechanical data	
Design	Cubic
Dimension (W x H x L)	30.7 mm x 40.3 mm x 2,408 mm
Housing material	Metal , Aluminum
Lens cover material	Plastic
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

Ex specification	
Ex-zone	22
Ex device group	II

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

Classification	
Customs tariff number	90314990
eCl@ss 8.0	27270910
eCl@ss 9.0	27270910
ETIM 5.0	EC002549
ETIM 6.0	EC002549

Dimensioned drawings

All dimensions in millimeters

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Part no.: 50127805 – CML720i-T10-2380.A-M12-EX – Light curtain transmitter
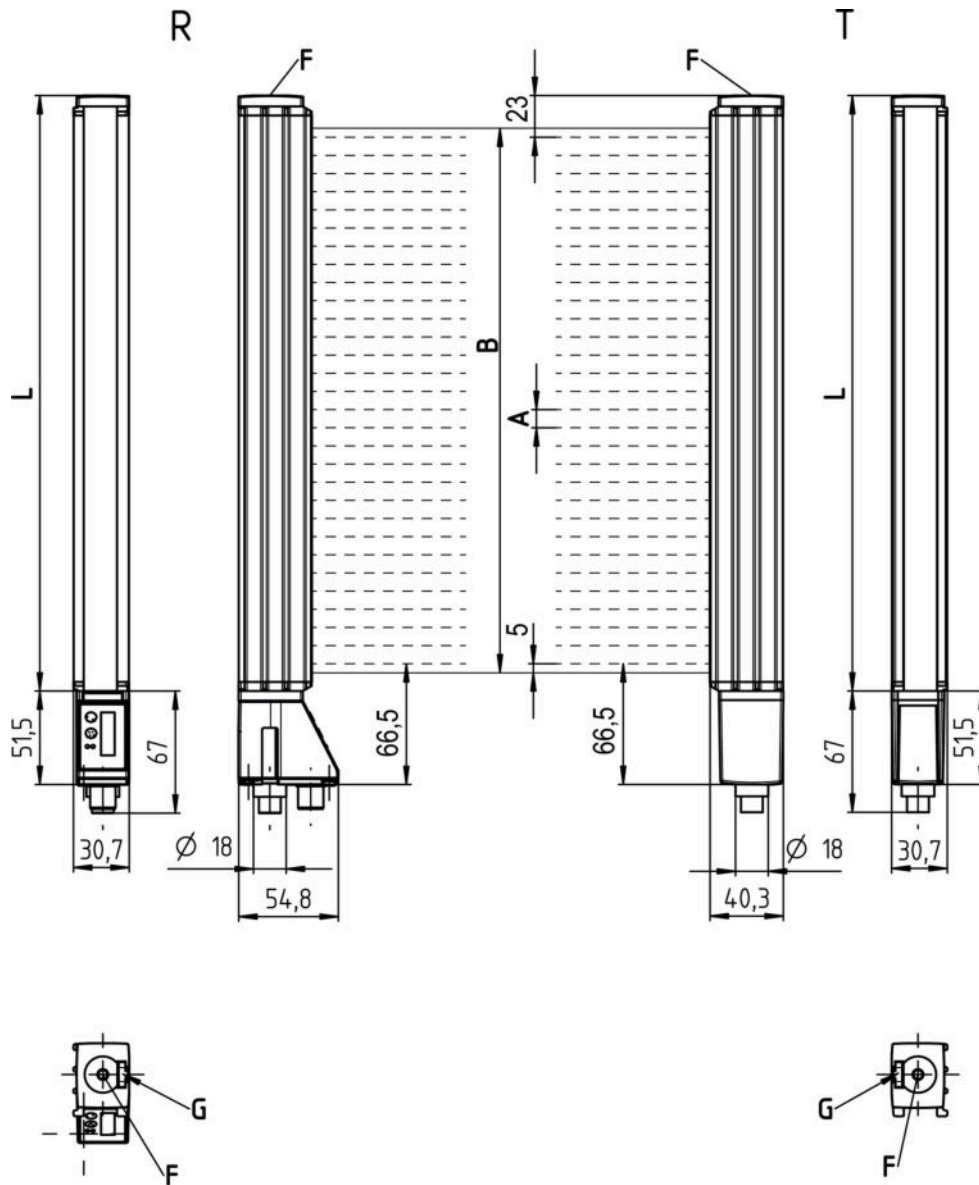
A Beam spacing 10 mm
B Measurement field length 2380 mm
F M6 thread
G Fastening groove
L Profile length 2408 mm
T Transmitter
R Receiver

A PWR / SW IN/OUT
B BUS IN / OUT

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Part no.: 50127805 – CML720i-T10-2380.A-M12-EX – Light curtain transmitter
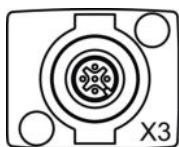
Electrical connection

Connection 1	
Function	Connection to receiver Sync-input Voltage supply
Type of connection	Connector
Thread size	M12
Type	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

LEDs

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

	Part no.	Designation	Article	Description
	50127801	CML720i-R10-2380.A/CN-M12-EX	Light curtain receiver	Operating range: 0.3 ... 7 m Interface: CANopen, IO-Link 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

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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
B	**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:**

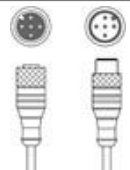| **Note** |
|---|
| A list with all available device types can be found on the Leuze electronic website at www.leuze.com. |

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 - 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

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Mounting technology - Mounting brackets
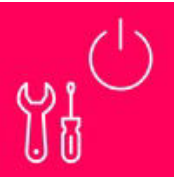
	Part no.	Designation	Article	Description
	50142900	BT 700M.5-2SET	Mounting device set	Contains: 2x mounting brackets, 1 teach template, 4 M6 x 10 screws Design of mounting device: Bracket mounting Fastening, at system: Through-hole mounting, T slotted hole Mounting bracket, at device: Screw type, Sliding block Type of mounting device: Rigid Material: Steel

Mounting technology - Swivel mounts

	Part no.	Designation	Article	Description
	429046	BT-2R1	Mounting bracket set	Contains: 2x BT-R swivel mount, 1 cylinder for mounting on the light curtain Fastening, at system: Through-hole mounting Mounting bracket, at device: Clampable Type of mounting device: Turning, 360° Material: Metal, Plastic

	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
	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 electronic website in the Download tab of the article detailed page.

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