



the sensor people





Part no.: 50127807 CML720i-T10-2700.A-M12-EX Light curtain transmitter





Figure can vary

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### **Technical data**

Basic data		
Series	720	
Operating principle Throughbeam principle		
	Transmitter	
Device type		
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	2,700 mm	
Number of beams	270 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 <sub>B</sub>	18 30 V , DC	
Residual ripple	0 15 % , From U <sub>B</sub>	
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	8.56 ms	
Connection	48: (1)	
Number of connections	1 Piece(s)	
Plug outlet	Axial	



Connection 1		
Type of connection	Connector	
Function	Connection to receiver Sync-input Voltage supply	
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)	30.7 mm x 40.3 mm x 2,728 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		

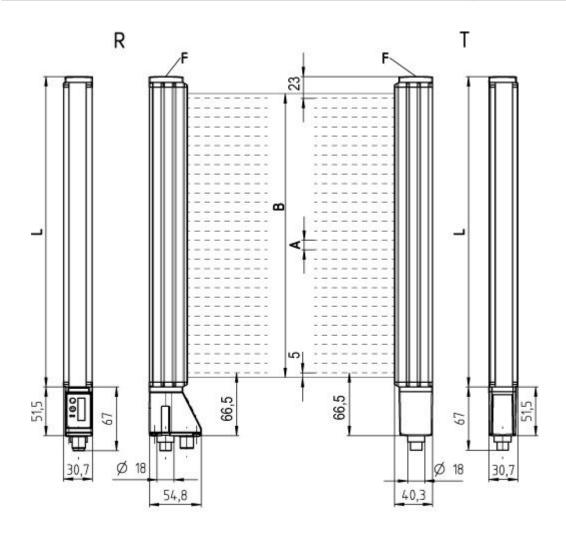
Certifications	
Degree of protection	IP 65
Protection class	III
Standards applied	IEC 60947-5-2

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









- A Beam spacing 10 mm
- B Measurement field length 2700 mm
- F M6 thread
- G Fastening groove
- L Profile length 2728 mm
- T Transmitter
- R Receiver



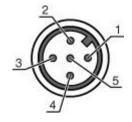
A PWR / SW IN/OUT B BUS IN / OUT



### **Electrical connection**

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

#### **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
50127803	CML720i- R10-2700.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		
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 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 - Swivel mounts

	Part no.	Designation	Article	Description
EE.	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
166	50121098	SET MD12-US2-IL1.1 + Zub.		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.