



the sensor people





Figure can vary

Part no.: 50126416 CML720i-T20-2370.A-M12-EX Light curtain transmitter





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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		
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 0.2 9 m		
Operating range limit			
Measurement field length	2,370 mm		
Number of beams	119 Piece(s)		
Beam spacing	20 mm		
Light source	LED , Infrared		
LED light wavelength	940 nm		
Measurement data			
Minimum object diameter	30 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	4 ms		
0			
Connection Number of connections	1 Diago(a)		
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 2,423 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	2 22	
Ex device group	II	

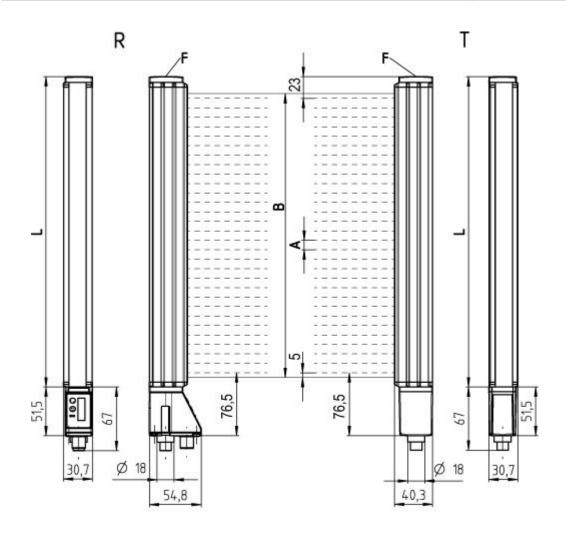
Certifications			
Degree of protection	IP 65		
Protection class	III		
Standards applied	IEC 60947-5-2		

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









- A Beam spacing 20 mm
- B Measurement field length 2370 mm
- F M6 thread
- G Fastening groove
- L Profile length 2408 mm
- T Transmitter
- R Receiver



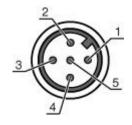
A PWR / SW IN/OUT B BUS IN / OUT



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
50126385	CML720i- R20-2370.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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Υ	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:		

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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.