## SMART SENSOR BUSINESS

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Part no.: 50119398 CML720i-T05-2480.A-M12 Light curtain transmitter



Figure can vary

# Contents

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

### Part no.: 50119398 – CML720i-T05-2480.A-M12 – Light curtain transmitter

#### **Technical data**

Basic data	
Series	720
Operating principle	Throughbeam principle
Device type	Transmitter
Contains	2x BT-NC sliding block
Application	Object measurement
Optical data	
Operating range	Guaranteed operating range
Operating range	0.1 3.5 m
Operating range limit	Typical operating range
Operating range limit	0.1 4.5 m
Measurement field length	2,480 mm
Number of beams	496 Piece(s)
Beam spacing	5 mm
Light source	LED , Infrared
LED light wavelength	940 nm
Measurement data	
Minimum object diameter	10 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 con- sisting of transmitter and receiver.
Timing	
Readiness delay	450 ms
Cycle time	15.28 ms
Connection	
Number of connections	1 Piece(s)
Plug outlet	Axial
Connection 1	
Function	Connection to receiver Sync-input Voltage supply
Function Type of connection	Sync-input
	Sync-input Voltage supply
Type of connection	Sync-input Voltage supply Connector
Type of connection Thread size	Sync-input Voltage supply Connector M12
Type of connection Thread size Type	Sync-input Voltage supply Connector M12 Male

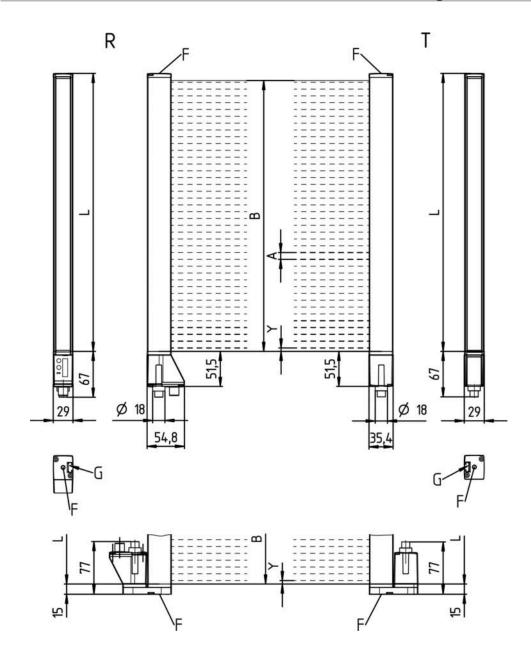
### Part no.: 50119398 – CML720i-T05-2480.A-M12 – Light curtain transmitter

Cubic		
29 mm x 35.4 mm x 2,555 mm		
Metal , Aluminum		
Plastic		
2,500 g		
Silver		
Groove mounting Via optional mounting device		
LED		
1 Piece(s)		
-30 60 °C		
-40 70 °C		
IP 65		
III		
c CSA US		
IEC 60947-5-2		
90314990		
27270910		
27270910		
EC002549		
EC002549		

#### **Dimensioned drawings**

All dimensions in millimeters

Part no.: 50119398 – CML720i-T05-2480.A-M12 – Light curtain transmitter



A Beam spacing 5 mm B Measurement field length 2480 mm

F M6 thread

- G Fastening groove
- L Profile length 2488 mm
- T Transmitter
- R Receiver
- Y 2.5 mm

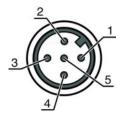


### Part no.: 50119398 – CML720i-T05-2480.A-M12 – Light curtain transmitter

#### **Electrical connection**

Connection 1		
Function	Connection to receiver Sync-input Voltage supply	
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**

#### 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
50119636	CML720i- R05-2480.A/CN- M12	Light curtain receiver	Operating range: 0.1 3.5 m Interface: CANopen Connection: Connector, M12, Axial, 8 -pin
50119826	CML720i- R05-2480.A/CV- M12	Light curtain receiver	Operating range: 0.1 3.5 m Analog outputs: 2 Piece(s), Voltage, Current Connection: Connector, M12, Axial, 8 -pin
50123470	CML720i- R05-2480.A/ D3-M12	Light curtain receiver	Operating range: 0.1 3.5 m Interface: RS 485 Connection: Connector, M12, Axial, 8 -pin

### Part no.: 50119398 – CML720i-T05-2480.A-M12 – Light curtain transmitter

	Part no.	Designation	Article	Description
	50119745	CML720i- R05-2480.A/L- M12	Light curtain receiver	Operating range: 0.1 3.5 m Interface: IO-Link Connection: Connector, M12, Axial, 8 -pin
	50122918	CML720i- R05-2480.A/PB- M12	Light curtain receiver	Operating range: 0.1 3.5 m Interface: PROFIBUS DP Connection: Connector, M12, Axial, 8 -pin
Į	50131882	CML720i- R05-2480.A/PN- M12	Light curtain receiver	Operating range: 0.1 3.5 m Interface: PROFINET Connection: Connector, M12, Axial, 8 -pin

#### Part number code

Part designation: CML7XXi-YZZ-AAAA.BCCCDDD-EEEFFF

FFF	-EX: Explosion protection:			
EEE	Electrical connection: M12: M12 connector			
DDD	Special equipment: -PS: Power Setting			
CCC	Interface: L: IO-Link /CN: CANopen /PB: PROFIBUS /PN: PROFINET /CV: Analog current and voltage output /D3: RS 485 Modbus			
В	Equipment: A: connector outlet, axial R: rear connector outlet			
AAAA	Measurement field length [mm], dependent on beam spacing			
ZZ	Beam spacing: 05: 5 mm 10: 10 mm 20: 20 mm 40: 40 mm			
Y	Device type: T: transmitter R: receiver			
7XXi	Series: 720i: 720i series 730i: 730i series			
CML	Operating principle: Measuring light curtain			

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

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#### 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

## Mounting technology - Mounting brackets

	Part no.	Designation	Article	Description
4 2 4 4 A	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
ęę.	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

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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.