Technical data sheet Light curtain transmitter Part no.: 50119449

CML720i-T40-2850.A-M12



Leuze

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Technical data

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Basic data

Basic data				
Series	720			
Operating principle	Throughbeam principle			
Device type	Transmitter			
Contains	2x BT-NC sliding block			
Application	Object measurement			
Special version				
Special version	Crossed-beam scanning			
	Diagonal-beam scanning			
	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	2,850 mm			
Number of beams	72 Piece(s)			
Beam spacing	40 mm			
Linkt e er men				
Light source	LED, Infrared			
•	940 nm			
LED light wavelength	,			
LED light wavelength Measurement data	,			
LED light wavelength Measurement data Minimum object diameter	940 nm			
LED light wavelength Measurement data Minimum object diameter Electrical data	940 nm 50 mm			
Light source LED light wavelength Measurement data Minimum object diameter Electrical data Protective circuit	940 nm 50 mm Polarity reversal protection			
LED light wavelength Measurement data Minimum object diameter Electrical data	940 nm 50 mm Polarity reversal protection Short circuit protected			
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LED light wavelength Measurement data Minimum object diameter Electrical data Protective circuit Performance data Supply voltage U _B	940 nm 50 mm 50 mm Polarity reversal protection Short circuit protected Transient protection 18 30 V, DC 0 15 %, From U _B 0 435 mA, The specified values refer			
LED light wavelength Measurement data Minimum object diameter Electrical data Protective circuit Performance data Supply voltage U _B Residual ripple	940 nm 50 mm 50 mm Polarity reversal protection Short circuit protected Transient protection 18 30 V, DC 0 15 %, From U _B 0 435 mA, The specified values refer to the entire package consisting of trans			
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LED light wavelength Measurement data Minimum object diameter Electrical data Protective circuit Performance data Supply voltage U _B Residual ripple Open-circuit current Timing Readiness delay	940 nm 50 mm 50 mm Polarity reversal protection Short circuit protected Transient protection 18 30 V, DC 0 15 %, From U _B 0 435 mA, The specified values refer to the entire package consisting of trans- mitter and receiver.			
LED light wavelength Measurement data Minimum object diameter Electrical data Protective circuit Performance data Supply voltage U _B Residual ripple Open-circuit current Timing	940 nm 50 mm 50 mm Polarity reversal protection Short circuit protected Transient protection 18 30 V, DC 0 15 %, From U _B 0 435 mA, The specified values refer to the entire package consisting of trans- mitter and receiver. 450 ms			
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protected	eCl@ss 8.0
tection	eCl@ss 9.0
	eCl@ss 10.0
	eCl@ss 11.0
С	ETIM 5.0
om U _B	ETIM 6.0
The specified values refer package consisting of trans- ceiver.	ЕТІМ 7.0

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				

Mechanical data

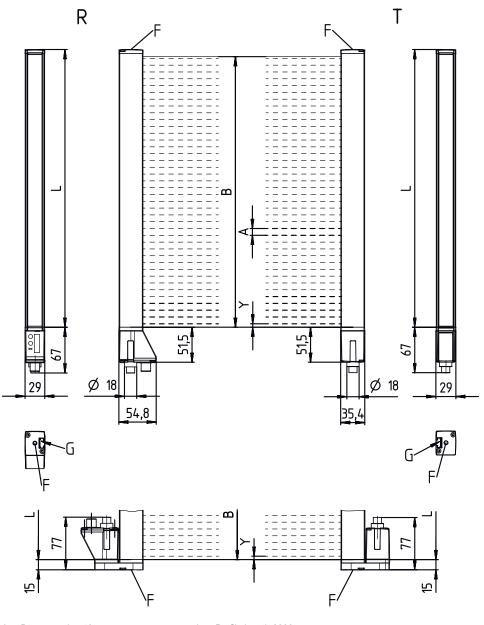
DesignCubicDimension (W x H x L)29 mm x 35.4 mm x 2,955 mmHousing materialMetalMetal housingAluminumLens cover materialPlasticNet weight2,850 gHousing colorSilverType of fasteningGroove mountingOperation and displayLEDNumber of LEDs1 Piece(s)Environmental data-30 60 °CAmbient temperature, operation-30 60 °CAmbient temperature, storage-40 70 °CCertificationsIIICertificationsc CSA USStandards appliedIEC 60947-5-2Classification27270910eCl@ss 51.427270910eCl@ss 51.427270910eCl@ss 51.027270910eCl@ss 51.127270910eCl@ss 51.127270910eCl@ss 11.027270910ETIM 5.0EC002549ETIM 6.0EC002549ETIM 6.0EC002549ETIM 7.0EC002549	Meenanical data	
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Housing colorSilverType of fasteningGroove mounting Via optional mounting deviceOperation and displayLEDType of displayLEDNumber of LEDs1 Piece(s)Environmental data-30 60 °CAmbient temperature, operation-30 60 °CAmbient temperature, storage-40 70 °CCertificationsIIIDegree of protectionPF 65Protection classIIICassificationsc CSA USStandards applied90314990ecl@ss 5.1.427270910ecl@ss 8.027270910ecl@ss 9.027270910ecl@ss 9.1.027270910ecl@ss 11.027270910ETIM 5.0Ec002549ETIM 6.0Ec002549	Lens cover material	Plastic
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Dimensioned drawings

All dimensions in millimeters



Beam spacing 40 mm А

- В Measurement field length 2850 mm
- F M6 thread
- G Fastening groove
- Profile length 2888 mm L Т
 - Transmitter
- R Receiver
- Υ 5 mm





Electrical connection

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Connection 1

Pin

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 assignment

			1-
1	FE/SHIELD		
2	V+		
3	GND	3	
4	RS 485 Tx+		
5	RS 485 Tx-		1

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

ountable le	Part no.	Designation	Article	Description
	50119687	CML720i-R40- 2850.A/CN-M12	Light curtain receiver	Operating range: 0.3 7 m Interface: CANopen Connection: Connector, M12, Axial, 8 -pin
	50119877	CML720i-R40- 2850.A/CV-M12	Light curtain receiver	Operating range: 0.3 7 m Analog outputs: 2 Piece(s), Voltage, Current Connection: Connector, M12, Axial, 8 -pin
	50123575	CML720i-R40- 2850.A/D3-M12	Light curtain receiver	Operating range: 0.3 7 m Interface: RS 485 Modbus Connection: Connector, M12, Axial, 8 -pin
	50119796	CML720i-R40- 2850.A/L-M12	Light curtain receiver	Operating range: 0.3 7 m Interface: IO-Link Connection: Connector, M12, Axial, 8 -pin

Suitable receivers

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	Part no.	Designation	Article	Description
Į	50123054	CML720i-R40- 2850.A/PB-M12	Light curtain receiver	Operating range: 0.3 7 m Interface: PROFIBUS DP Connection: Connector, M12, Axial, 8 -pin
ļ	50131996	CML720i-R40- 2850.A/PN-M12	Light curtain receiver	Operating range: 0.3 7 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: 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 website at www.leuze.com.

Notes

Observe intended use!

This product is not a safety sensor and is not intended as personnel protection.

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

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
1.1. 1.1	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

Mounting technology - Swivel mounts

	Part no.	Designation	Article	Description
ęę.	429046	BT-2R1	Mounting bracket set	Fastening, at system: Through-hole mounting Mounting bracket, at device: Clampable Type of mounting device: Turning, 360° Material: Metal, Plastic

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Accessories

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Configuration devices

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