Technical data sheet Light curtain transmitter Part no.: 50118605 CML730i-T05-2400.A-M12





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Technical data

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Device type Transmitter Contains 2x BT-NC sliding block Application Detection of transparent objects Object measurement Object measurement Special version Crossed-beam scanning Diagonal-beam scanning Parallel-beam scanning Operating range Guaranteed operating range Operating range, transparent media 0.1 4 m Operating range, transparent media 0.1 6 m Measurement field length 2.400 mm Number of beams 480 Piece(s) Beam spacing 5 mm Light source LED, Infrared LED light wavelength 940 nm Weasurement data Winimum object diameter Protective circuit Polarity reversal protection Short circuit protected Transient protection Short circuit protected Transient protection Short circuit current 0 435 mA, The specified values refer to the entire package consisting of transmitter and receiver. Timing Connection Number of connections 1 Piece(s)	Series	730
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LED light wavelength 940 nm Measurement data Minimum object diameter 10 mm Electrical data 10 mm Protective circuit Polarity reversal protection Short circuit protected Transient protection Performance data Supply voltage U _B 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 X450 ms Cycle time 5 ms Connection 1 Piece(s)	Beam spacing	5 mm
Measurement data Minimum object diameter 10 mm Electrical data Polarity reversal protection Protective circuit Polarity reversal protected Transient protected Transient protection Supply voltage UB 18 30 V, DC Residual ripple 0 15 %, From UB 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 5 ms 5 ms Connection 1 Piece(s) 1 Piece(s)	Light source	LED, Infrared
Minimum object diameter 10 mm Electrical data Polarity reversal protection Protective circuit Polarity reversal protection Short circuit protected Transient protection Performance data Supply voltage U _B 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 Readiness delay 450 ms Cycle time 5 ms Connection 1 Piece(s)	LED light wavelength	940 nm
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 trans mitter and receiver. Timing Readiness delay 450 ms Cycle time 5 ms Connection Number of connections 1 Piece(s)	Measurement data	
Protective circuit Polarity reversal protection Short circuit protected Transient protection Performance data Image: Supply voltage UB Supply voltage UB 18 30 V, DC Residual ripple 0 15 %, From UB Open-circuit current 0 435 mA, The specified values refert to the entire package consisting of transmitter and receiver. Timing Readiness delay Readiness delay 450 ms Cycle time 5 ms Connection 1 Piece(s)	Minimum object diameter	10 mm
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 5 ms Connection 1 Piece(s)	Electrical data	
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 5 ms Connection 1 Piece(s)	Protective circuit	Polarity reversal 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 5 ms Connection 1 Piece(s)		Short circuit protected
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 5 ms Connection 1 Piece(s)		Transient protection
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 5 ms Connection 1 Piece(s)	Performance data	
Open-circuit current 0 435 mA, The specified values refer to the entire package consisting of transmitter and receiver. Timing Readiness delay Readiness delay 450 ms Cycle time 5 ms Connection 1 Piece(s)		18 30 V, DC
to the entire package consisting of transmitter and receiver. Timing Readiness delay 450 ms Cycle time 5 ms Connection Number of connections 1 Piece(s)	Residual ripple	0 15 %, From U _B
Readiness delay 450 ms Cycle time 5 ms Connection 1 Piece(s)	Open-circuit current	0 435 mA, The specified values refer to the entire package consisting of trans mitter and receiver.
Cycle time 5 ms Connection Number of connections 1 Piece(s)	Timing	
Connection Number of connections 1 Piece(s)	Readiness delay	450 ms
Number of connections 1 Piece(s)	Cycle time	5 ms
	Connection	
Plug outlet Axial		
	Number of connections	1 Piece(s)

Connection 1		
Function	Connection to receiver	
Type of connection	Connector	
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)	29 mm x 35.4 mm x 2,475 mm
Housing material	Metal
Metal housing	Aluminum
Lens cover material	Plastic
Net weight	2,400 g
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

Certifications

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

Classification

Customs tariff number	90314990	
eCl@ss 5.1.4	27270910	
eCl@ss 8.0	27270910	
eCl@ss 9.0	27270910	
eCl@ss 10.0	27270910	
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ETIM 5.0	EC002549	
ETIM 6.0	EC002549	
ETIM 7.0	EC002549	

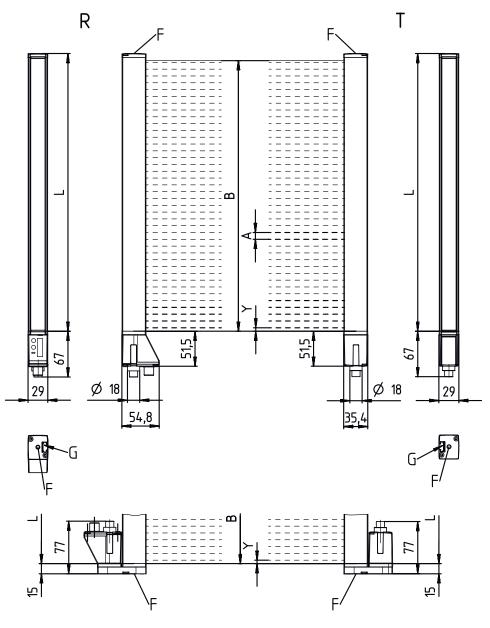
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We reserve the right to make technical changes

Dimensioned drawings

All dimensions in millimeters



- В Measurement field length 2400 mm
- F M6 thread
- G Fastening groove
- Profile length 2408 mm L Т
- Transmitter
- R Receiver
- 2.5 mm Υ



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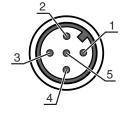
Electrical connection

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Connection 1

Function	Connection to receiver
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

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

Suitable	Part no.	Designation	Article	Description
	50118684	CML730i-R05- 2400.A/CN-M12	Light curtain receiver	Operating range: 0.1 4.5 m Interface: CANopen Connection: Connector, M12, Axial, 8 -pin
Į	50118847	CML730i-R05- 2400.A/CV-M12	Light curtain receiver	Operating range: 0.1 4.5 m Analog outputs: 2 Piece(s), Voltage, Current Connection: Connector, M12, Axial, 8 -pin
	50123299	CML730i-R05- 2400.A/D3-M12	Light curtain receiver	Operating range: 0.1 4.5 m Interface: RS 485 Modbus Connection: Connector, M12, Axial, 8 -pin
	50118766	CML730i-R05- 2400.A/L-M12	Light curtain receiver	Operating range: 0.1 4.5 m Interface: IO-Link Connection: Connector, M12, Axial, 8 -pin

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Suitable receivers

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	Part no.	Designation	Article	Description
Į	50123112	CML730i-R05- 2400.A/PB-M12	Light curtain receiver	Operating range: 0.1 4.5 m Interface: PROFIBUS DP Connection: Connector, M12, Axial, 8 -pin
Į	50131718	CML730i-R05- 2400.A/PN-M12	Light curtain receiver	Operating range: 0.1 4.5 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	the 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
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
6	☆ A list with all available accessories can be found on the Leuze website in the Download tab of the article detailed page.