## SMART SENSOR BUSINESS

## Leuze electronic

the sensor people



Part no.: 50118585 CML730i-T05-800.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.: 50118585 – CML730i-T05-800.A-M12 – Light curtain transmitter

#### **Technical data**

Basic data	
Series	730
Operating principle	Throughbeam principle
Device type	Transmitter
Contains	2x BT-NC sliding block
Application	Detection of transparent objects Object measurement
Optical data	
Operating range	Guaranteed operating range
Operating range	0.1 4 m
Operating range, transparent media	0.1 1.75 m
Operating range limit	Typical operating range
Operating range limit	0.1 6 m
Measurement field length	800 mm
Number of beams	160 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 UB	18 30 V , DC
Residual ripple	0 15 % , From U <sub>B</sub>
Open-circuit current	0 215 mA , The specified values refer to the entire package consisting of transmitter and receiver.
Timing	
Readiness delay	450 ms
Cycle time	1.8 ms
Connection	
Connection Number of connections	1 Piece(s)
Number of connections	1 Piece(s) Axial
Number of connections	
Number of connections Plug outlet	
Number of connections Plug outlet Connection 1 Function	Axial
Number of connections Plug outlet Connection 1	Axial Connection to receiver
Number of connections Plug outlet Connection 1 Function Type of connection Thread size	Axial Connection to receiver Connector
Number of connections Plug outlet Connection 1 Function Type of connection Thread size Type	Axial Connection to receiver Connector M12 Male
Number of connections Plug outlet Connection 1 Function Type of connection Thread size	Axial Connection to receiver Connector M12

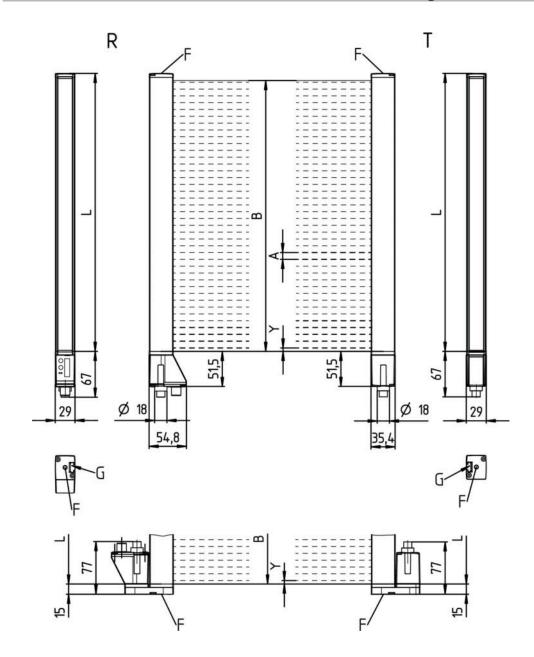
### Part no.: 50118585 – CML730i-T05-800.A-M12 – Light curtain transmitter

Mechanical data			
Design	Cubic		
Dimension (W x H x L)	29 mm x 35.4 mm x 875 mm		
Housing material	Metal , Aluminum		
Lens cover material	Plastic		
Net weight	950 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			
Certifications	c CSA US		
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

Part no.: 50118585 – CML730i-T05-800.A-M12 – Light curtain transmitter



A Beam spacing 5 mm B Measurement field length 800 mm

F M6 thread

G Fastening groove

- L Profile length 808 mm
- T Transmitter
- R Receiver

Y 2.5 mm

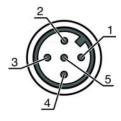


### Part no.: 50118585 – CML730i-T05-800.A-M12 – Light curtain transmitter

#### **Electrical connection**

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**

#### 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
50118664	CML730i- R05-800.A/CN- M12	Light curtain receiver	Operating range: 0.1 4.5 m Interface: CANopen Connection: Connector, M12, Axial, 8 -pin
50118827	CML730i- R05-800.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
50123279	CML730i- R05-800.A/ D3-M12	Light curtain receiver	Operating range: 0.1 4.5 m Interface: RS 485 Connection: Connector, M12, Axial, 8 -pin

### Part no.: 50118585 – CML730i-T05-800.A-M12 – Light curtain transmitter

Part no.	Designation	Article	Description
50118746	CML730i- R05-800.A/L-M12	Light curtain receiver	Operating range: 0.1 4.5 m Interface: IO-Link Connection: Connector, M12, Axial, 8 -pin
50123130	CML730i- R05-800.A/PB- M12	Light curtain receiver	Operating range: 0.1 4.5 m Interface: PROFIBUS DP Connection: Connector, M12, Axial, 8 -pin
50131746	CML730i- R05-800.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			
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:			

Ν	ote

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

#### Part no.: 50118585 – CML730i-T05-800.A-M12 – Light curtain transmitter

#### 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 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
ęł.	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.: 50118585 – CML730i-T05-800.A-M12 – Light curtain transmitter

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.