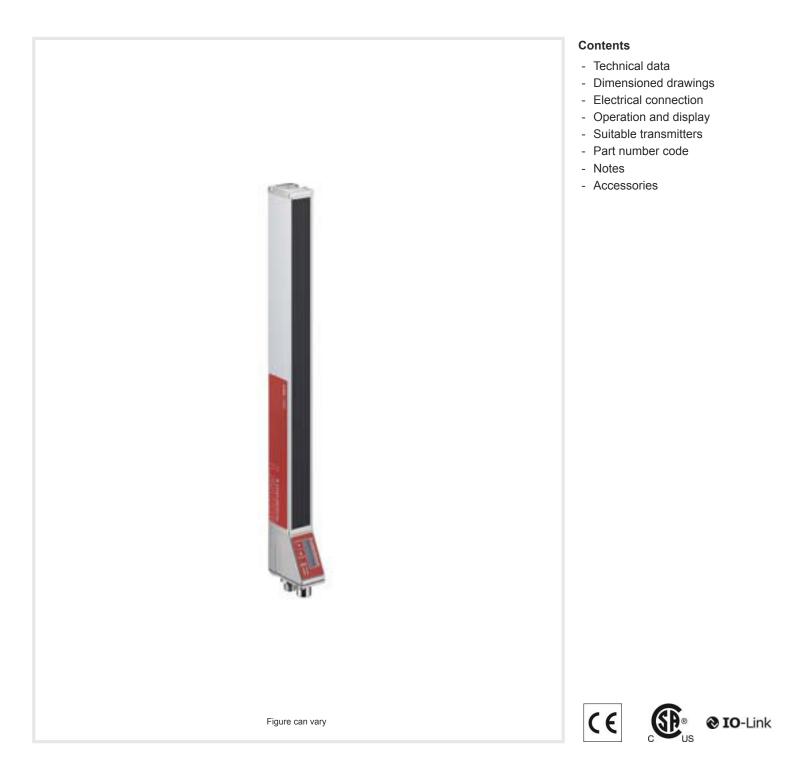
Leuze

Technical data sheet Light curtain receiver Part no.: 50118761 CML730i-R05-2000.A/L-M12



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Technical data

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Basic data Series 730 **Operating principle** Throughbeam principle Device type Receiver Contains 2x BT-NC sliding block Application Detection of transparent objects Object measurement **Special version** Special version Crossed-beam scanning Diagonal-beam scanning Parallel-beam scanning **Optical data** Operating range Guaranteed operating range **Operating range** 0.1 ... 4.5 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 2,000 mm Number of beams 400 Piece(s) Beam spacing 5 mm **Measurement data** Minimum object diameter 10 mm **Electrical data** Protective circuit Polarity reversal protection Short circuit protected Transient protection Performance data Supply voltage U_B 18 ... 30 V, DC 0 ... 15 %, From U_B **Residual ripple** 0 ... 435 mA, The specified values refer **Open-circuit current** to the entire package consisting of transmitter and receiver. Inputs/outputs selectable Output current, max. 100 mA Input resistance 6,000 Ω Number of inputs/outputs selectable 4 Piece(s) Туре Inputs/outputs selectable Voltage type, outputs DC Switching voltage, outputs Typ. U_B / 0 V Voltage type, inputs DC Switching voltage, inputs high: ≥6V low: ≤4V Input/output 1 Activation/disable delay 0 ... 1 ms Timing Readiness delay 450 ms Cycle time 4.15 ms Response time per beam 10 µs Interface

IO-Link

	COM2
COM mode Specification	V1.0.1
Specification	V1.0.1
Min. cycle time	COM2 = 2.3 ms
Service interface	
уре	IO-Link
IO-Link	
Function	Configuration via software
	Service
Connection	
lumber of connections	2 Piece(s)
Plug outlet	Axial
Connection 1	
Function	Configuration interface
	Signal IN
	Signal OUT
True of each state in	Voltage supply
Type of connection	Connector
Thread size	M12 Male
Type Material	Male
No. of pins	8 -pin
Encoding	A-coded
	1.00000
Connection 2	
Function	Connection to transmitter
Type of connection	Connector
Thread size	M12
Type	Female
Material	Metal
No. of pins Encoding	5 -pin A-coded
Licoung	A-coucu
lechanical data	
	Cubic
Design	
Dimension (W x H x L)	
Dimension (W x H x L) Iousing material	Metal
Dimension (W x H x L) Iousing material Aetal housing	Metal Aluminum
Dimension (W x H x L) Housing material Metal housing Lens cover material	Metal Aluminum Plastic
Dimension (W x H x L) Housing material Metal housing Lens cover material Net weight	Metal Aluminum Plastic 2,100 g
Dimension (W x H x L) Housing material Metal housing Lens cover material Net weight Housing color	Metal Aluminum Plastic 2,100 g Silver
Dimension (W x H x L) Housing material Metal housing Lens cover material Net weight	Metal Aluminum Plastic 2,100 g Silver Groove mounting
Dimension (W x H x L) Housing material Metal housing Lens cover material Net weight Housing color	Metal Aluminum Plastic 2,100 g Silver
Dimension (W x H x L) Housing material Metal housing Lens cover material Net weight Housing color	Aluminum Plastic 2,100 g Silver Groove mounting
Dimension (W x H x L) Housing material Metal housing Lens cover material Net weight Housing color Type of fastening	Metal Aluminum Plastic 2,100 g Silver Groove mounting
Dimension (W x H x L) Housing material Metal housing Lens cover material Net weight Housing color Type of fastening Deperation and display	Metal Aluminum Plastic 2,100 g Silver Groove mounting Via optional mounting device
Dimension (W x H x L) Housing material Metal housing Lens cover material Net weight Housing color Type of fastening Deperation and display	Metal Aluminum Plastic 2,100 g Silver Groove mounting Via optional mounting device
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Dimension (W x H x L) Housing material Metal housing Lens cover material Net weight Housing color Type of fastening Deeration and display Type of display	Metal Aluminum Plastic 2,100 g Silver Groove mounting Via optional mounting device LED DLED display 2 Piece(s)
Dimension (W x H x L) Housing material Metal housing Lens cover material Net weight Housing color Type of fastening Deeration and display Type of display	Metal Aluminum Plastic 2,100 g Silver Groove mounting Via optional mounting device LED OLED display 2 Piece(s) Software
Dimension (W x H x L) Housing material Metal housing Lens cover material Net weight Housing color Type of fastening Deration and display Type of display Number of LEDs Type of configuration Derational controls	Metal Aluminum Plastic 2,100 g Silver Groove mounting Via optional mounting device LED LED display 2 Piece(s) Software Teach-in
Dimension (W x H x L) Housing material Metal housing Lens cover material Net weight Housing color Type of fastening Deration and display Type of display Number of LEDs Type of configuration	Metal Aluminum Plastic 2,100 g Silver Groove mounting Via optional mounting device LED LED display 2 Piece(s) Software Teach-in

Technical data

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Certifications

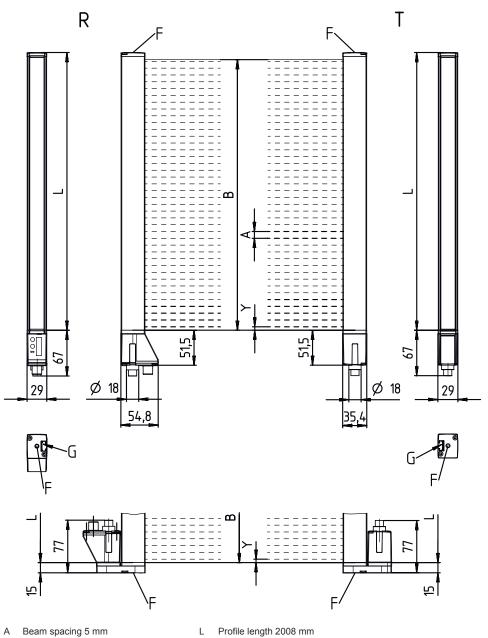
Degree of protection	IP 65
Protection class	III
Certifications	c CSA US
Standards applied	IEC 60947-5-2

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
eCl@ss 11.0	27270910
ETIM 5.0	EC002549
ETIM 6.0	EC002549
ETIM 7.0	EC002549
Cl@ss 10.0 Cl@ss 11.0 FIM 5.0 FIM 6.0	27270910 27270910 EC002549 EC002549

Dimensioned drawings

All dimensions in millimeters



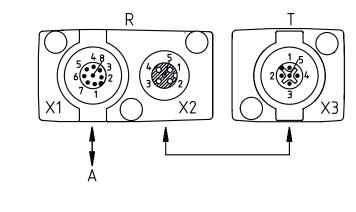
- Beam spacing 5 mm А
- В Measurement field length 2000 mm
- F M6 thread G
 - Fastening groove
- Transmitter R Receiver
- 2.5 mm Υ

Т



Dimensioned drawings





A PWR / SW IN / OUT

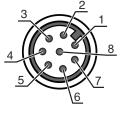
Electrical connection

Connection 1

Function	Configuration interface
	Signal IN
	Signal OUT
	Voltage supply
Type of connection	Connector
Thread size	M12
Туре	Male
Material	Metal
No. of pins	8 -pin
Encoding	A-coded

Pin Pin assignment

1	V+
2	IO1
3	GND
4	IO-Link
5	102
6	103
7	104
8	GND



Connection 2

Function	Connection to transmitter
Type of connection	Connector
Thread size	M12
Туре	Female
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 1

2

t curtain rec	eiver • Part no.: 50118761 • CML730i-R05-2000.A/L-M12	
peration	on and display	Leuze
D	Display	Meaning
	Green, continuous light	Operational readiness
	Green, flashing	Teach / error
	Yellow, continuous light	Light path free, with function reserve
	Yellow, flashing	No function reserve
	Off	Object detected

Suitable transmitters

 Part no.	Designation	Article	Description
50118600	CML730i-T05- 2000.A-M12	Light curtain transmitter	Operating range: 0.1 4 m Connection: Connector, M12, Axial, 5 -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
Note	
A list wi	th 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.

 $\ensuremath{^{\ensuremath{\Downarrow}}}$ 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:
A	 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 - Connection cables

 Part no.	Designation	Article	Description
50135128	KD S-M12-8A-P1-050	Connection cable	Connection 1: Connector, M12, Axial, Female, A-coded, 8 -pin Connection 2: Open end Shielded: Yes Cable length: 5,000 mm Sheathing material: PUR

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
 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

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Accessories

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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

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
y, U	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 website in the Download tab of the article detailed page.