SMART SENSOR BUSINESS

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Part no.: 50119206 CML730i-R40-1570.R/L-M12 Light curtain receiver



Figure can vary

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Part no.: 50119206 – CML730i-R40-1570.R/L-M12 – Light curtain receiver

Technical data

Basic data				
Series	730			
Operating principle	Throughbeam principle			
Device type	Receiver			
Contains	Accessories for the use of the BT-2R1			
Application	Detection of transparent objects Object measurement			
Optical data				
Operating range	Guaranteed operating range			
Operating range	0.3 9.5 m			
Operating range, transparent media	0.3 3.5 m			
Operating range limit	Typical operating range			
Operating range limit	0.2 12 m			
Measurement field length	1,570 mm			
Number of beams	39 Piece(s)			
Beam spacing	40 mm			
Measurement data				
Minimum object diameter	50 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 _B			
Open-circuit current	0 350 mA , The specified values refer to the entire package con- sisting 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			
0 0 7 1				
Voltage type inputs				
Voltage type, inputs	DC			
Switching voltage, inputs				
	DC high: ≥6V			
Switching voltage, inputs	DC high: ≥6V			
Switching voltage, inputs Input/output 1	DC high: ≥6V low: ≤4V			
Switching voltage, inputs Input/output 1 Activation/disable delay	DC high: ≥6V low: ≤4V			
Switching voltage, inputs Input/output 1 Activation/disable delay Timing	DC high: ≥6V low: ≤4V 0 1 ms			

Interface

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IO-Link			
COM2			
V1.0.1 V1.1			
COM2 = 2.3 ms	COM2 = 2.3 ms		
IO-Link			
Configuration via software Service			
2 Piece(s)			
Rear side			
Configuration interface Signal IN Signal OUT Voltage supply			
Connector			
M12			
Male			
Metal			
8 -pin			
A-coded			
Connection to transmitter			
Connector			
M12			
Female			
Metal			
5 -pin			
A-coded			
Cubic			
29 mm x 35.4 mm x 1,623 mm			
Metal , Aluminum			
Plastic			
1,800 g			
Silver			
Groove mounting Via optional mounting device			
LED OLED display			
2 Piece(s)			
	Software Teach-in		
	V1.0.1 V1.1 COM2 = 2.3 ms IO-Link Configuration via software Service 2 Piece(s) Rear side Configuration interface Signal N Signal OUT Voltage supply Connector M12 Male Metal 8 -pin A-coded Connector M12 Male Metal 8 -pin A-coded Connector M12 Connector M12 Female Metal 5 -pin A-coded Cubic 29 mm x 35.4 mm x 1,823 mm Metal 29 mm x 35.4 mm x 1,823 mm Metal 1,800 g Silver Groove mounting Via optional mounting device		

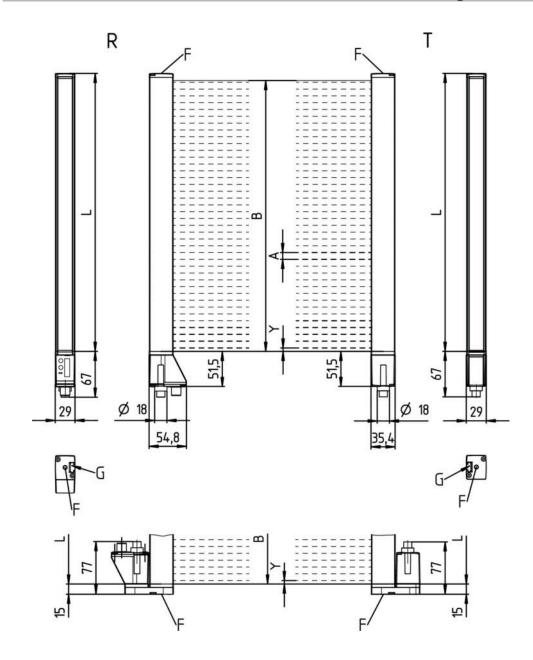
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Membrane keyboard	
-30 60 °C	
-40 70 °C	
IP 65	
III	
c CSA US	
IEC 60947-5-2	
90314990	
27270910	
27270910	
EC002549	
EC002549	

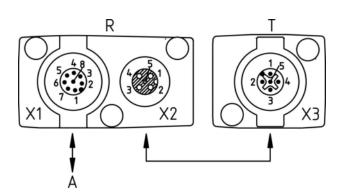
Dimensioned drawings

All dimensions in millimeters

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- A Beam spacing 40 mm B Measurement field length 1570 mm
- F M6 thread
- G Fastening groove L Profile length 1608 mm
- T Transmitter
- R Receiver
- Y 5 mm



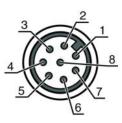
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A PWR / SW IN/OUT

Electrical connection

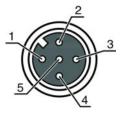
Connection 1		
Function	Configuration interface Signal IN Signal OUT Voltage supply	
Type of connection	Connector	
Thread size	M12	
Туре	Male	
Material	Metal	
No. of pins	8 -pin	
Encoding	A-coded	

Pin	Pin assignment
1	V+
2	101
3	GND
4	IO-Link
5	102
6	103
7	IO4
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-



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Operation and display

LEDs

LED	Display	Meaning
1	Green, continuous light	Operational readiness
	Green, flashing	Teach / error
		Measurement frequency display
2	Yellow, continuous light	Light path free, with function reserve
	Yellow, flashing	No function reserve
	Off	Object detected

Suitable transmitters

Part no.	Designation	Article	Description
50118988	CML730i- T40-1570.R-M12	Light curtain transmitter	Operating range: 0.3 9.5 m Connection: Connector, M12, Rear side, 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 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 - Connection cables

Part no.	Designation	Article	Description
50135128	KD S-M12-8A- P1-050		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	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

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Mounting technology - Swivel mounts

	Part no.	Designation	Article	Description
RR.	429046	BT-2R1	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.	Designation	Article	Description
50121098	SET MD12-US2-IL1.1 + Zub.		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.