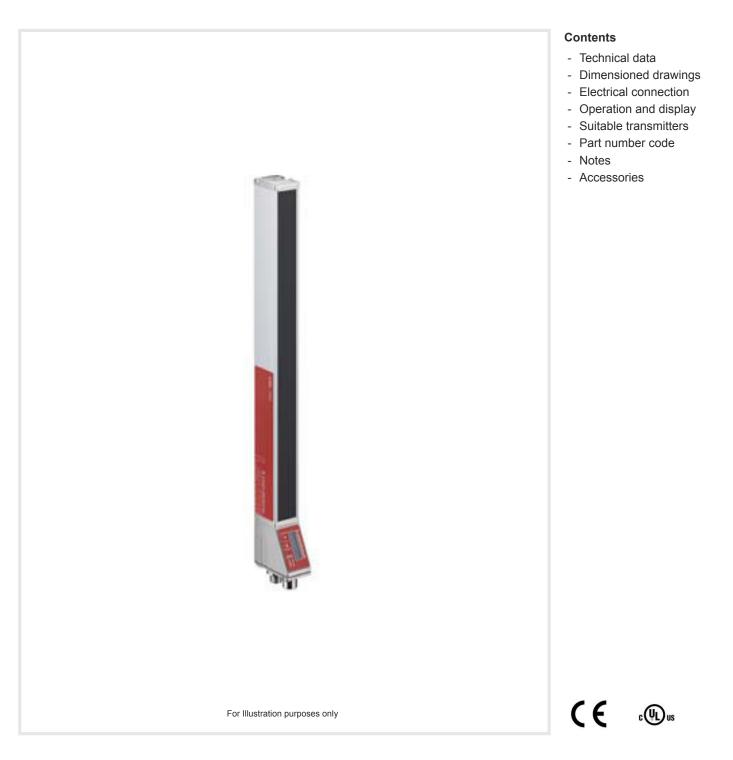


Technical data sheet Light curtain receiver Part no.: 50123112 CML730i-R05-2400.A/PB-M12



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Technical data

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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	0.1 4.5 m
Operating range	Guaranteed operating range
Operating range, transparent media	0.1 1.75 m
Operating range limit	0.1 6 m
Operating range limit	Typical operating range
Measurement field length	2,400 mm
Number of beams	480 Piece(s)
Beam spacing	5 mm
Measurement data	
Minimum object diameter	10 mm
Electrical data	
Protective circuit	Delerity reversel protection
	Polarity reversal protection Short circuit protected
	Short circuit protected
Performance data	Short circuit protected Transient protection
Supply voltage U _B	Short circuit protected Transient protection 18 30 V, DC
Supply voltage U _B Residual ripple	Short circuit protected Transient protection 18 30 V, DC 0 15 %, From U _B
Supply voltage U _B	Short circuit protected Transient protection 18 30 V, DC
Supply voltage U _B Residual ripple Open-circuit current	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
Supply voltage U _B Residual ripple Open-circuit current Inputs/outputs selectable	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.
Supply voltage U _B Residual ripple Open-circuit current Inputs/outputs selectable Output current, max.	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.
Supply voltage U _B Residual ripple Open-circuit current Inputs/outputs selectable Output current, max. Input resistance	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. 100 mA 6,000 Ω
Supply voltage U _B Residual ripple Open-circuit current Inputs/outputs selectable Output current, max. Input resistance Number of inputs/outputs selectable	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. 100 mA 6,000 Ω 2 Piece(s)
Supply voltage U _B Residual ripple Open-circuit current Inputs/outputs selectable Output current, max. Input resistance Number of inputs/outputs selectable Type	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. 100 mA 6,000 Ω 2 Piece(s) Inputs/outputs selectable
Supply voltage U _B Residual ripple Open-circuit current Inputs/outputs selectable Output current, max. Input resistance Number of inputs/outputs selectable Type Voltage type, outputs	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. 100 mA 6,000 Ω 2 Piece(s) Inputs/outputs selectable DC
Supply voltage U _B Residual ripple Open-circuit current Inputs/outputs selectable Output current, max. Input resistance Number of inputs/outputs selectable Type Voltage type, outputs Switching voltage, outputs	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. 100 mA 6,000 Ω 2 Piece(s) Inputs/outputs selectable DC Typ. U _B / 0 V
Supply voltage U _B Residual ripple Open-circuit current Inputs/outputs selectable Output current, max. Input resistance Number of inputs/outputs selectable Type Voltage type, outputs Switching voltage, outputs Voltage type, inputs	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. 100 mA 6,000 Ω 2 Piece(s) Inputs/outputs selectable DC Typ. U _B / 0 V DC
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Supply voltage U _B Residual ripple Open-circuit current Inputs/outputs selectable Output current, max. Input resistance Number of inputs/outputs selectable Type Voltage type, outputs Switching voltage, outputs Voltage type, inputs Switching voltage, inputs	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. 100 mA 6,000 Ω 2 Piece(s) Inputs/outputs selectable DC Typ. U _B / 0 V DC high: \geq 6V
Supply voltage U _B Residual ripple Open-circuit current Inputs/outputs selectable Output current, max. Input resistance Number of inputs/outputs selectable Type Voltage type, outputs Switching voltage, outputs Voltage type, inputs	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. 100 mA 6,000 Ω 2 Piece(s) Inputs/outputs selectable DC Typ. U _B / 0 V DC high: \geq 6V
Supply voltage U _B Residual ripple Open-circuit current Inputs/outputs selectable Output current, max. Input resistance Number of inputs/outputs selectable Type Voltage type, outputs Switching voltage, outputs Voltage type, inputs Switching voltage, inputs Input/output 1	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. 100 mA 6,000 Ω 2 Piece(s) Inputs/outputs selectable DC Typ. U _B / 0 V DC high: ≥6V Iow: ≤ 4 V
Supply voltage U _B Residual ripple Open-circuit current Inputs/outputs selectable Output current, max. Input resistance Number of inputs/outputs selectable Type Voltage type, outputs Switching voltage, outputs Voltage type, inputs Switching voltage, inputs Switching voltage, inputs Input/output 1 Activation/disable delay	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. 100 mA 6,000 Ω 2 Piece(s) Inputs/outputs selectable DC Typ. U _B / 0 V DC high: ≥6V Iow: ≤ 4 V

Туре

PROFIBUS DP

	ervice interface		
y	ре	IO-Link	
	IO-Link		
	Function	Configuration via software	
	T unction	Service	
	onnection		
ι	umber of connections	2 Piece(s)	
I	ug outlet	Axial	
	Connection 1		
	Function	Configuration interface	
		Connection to transmitter	
		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	
	Composition 2		
	Connection 2 Function	BUS IN	
	Function		
		BUS OUT	
	Type of connection	Connector	
	Thread size	M12	
	Туре	Female	
	Material	Metal	
	No. of pins	5 -pin	
	Encoding	B-coded	
	echanical data		
	esign	Cubic	
	mension (W x H x L)	29 mm x 35.4 mm x 2,475 mm	
	ousing material	Metal	
	etal housing	Aluminum	
	eral nousing ens cover material	Plastic	
	et weight	2,450 g	
	ousing color	Silver	
У	pe of fastening	Groove mounting	
		Via optional mounting device	
1	peration and display		
	pe of display	LED	
1	h anakanak	OLED display	
,	umber of LEDs		
		2 Piece(s)	
y	pe of configuration	Software	
		Teach-in	
)	perational controls	Membrane keyboard	
	nvironmental data		
-	nbient temperature, operation	-30 60 °C	
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Technical data

Certifications

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

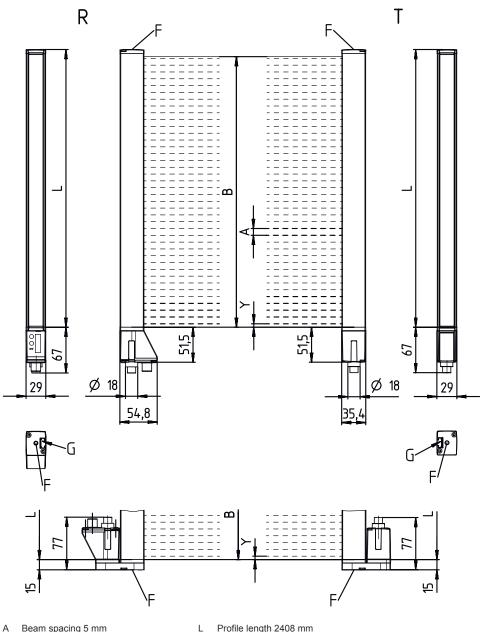
Classification

Customs tariff number	90314990
ECLASS 5.1.4	27270910
ECLASS 8.0	27270910
ECLASS 9.0	27270910
ECLASS 10.0	27270910
ECLASS 11.0	27270910
ECLASS 12.0	27270910
ECLASS 13.0	27270910
ECLASS 14.0	27270910
ECLASS 15.0	27270910
ETIM 5.0	EC002549
ETIM 6.0	EC002549
ETIM 7.0	EC002549
ETIM 8.0	EC002549
ETIM 9.0	EC002549
ETIM 10.0	EC002549

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Dimensioned drawings

All dimensions in millimeters

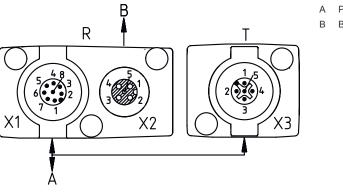


- Beam spacing 5 mm А
- В Measurement field length 2400 mm
- F M6 thread G
 - Fastening groove
- Profile length 2408 mm Т
 - Transmitter
- R Receiver
- 2.5 mm Υ



Dimensioned drawings





PWR / SW IN / OUT BUS IN / OUT

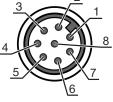
Electrical connection

Connection 1

Function	Configuration interface
	Connection to transmitter
	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	I/O 1		
3	GND		
4	IO-Link		
5	I/O 2		
6	RS 485 Tx+		
7	RS 485 Tx+		
8	FE/SHIELD		



Connection 2

Function	BUS IN
	BUS OUT
Type of connection	Connector
Thread size	M12
Туре	Female
Material	Metal
No. of pins	5 -pin
Encoding	B-coded

Electrical connection

1 2

3

4

5

Pin Pin assignment V+ Tx-PB GND Tx+ FE/SHIELD



LED	Display	Meaning
1	Green, continuous light	Operational readiness
	Green, flashing	Teach / error
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
50118605	CML730i-T05- 2400.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
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: Axial connector outlet 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



Part number code



DDD	Special equipment -PS: Power Setting
EEE	Electrical connection M12: M12 connector
FFF	-EX: Explosion protection
	Note
A	∜ 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. the product may only be put into operation by competent persons. 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
50132079	KD U-M12-5A-V1- 050	Connection cable	Connection 1: Connector, M12, Axial, Female, A-coded, 5 -pin Connector, LED: No Connection 2: Open end Shielded: No Cable length: 5.000 mm Sheathing material: PVC

Connection technology - Y distribution cables

	Part no.	Designation	Article	Description
	50118183	K-Y1 M12A-5m- M12A-S-PUR	Interconnection cable	Connection 1: Connector, M12, Axial, Female, A-coded, 5 -pin Connection 2: Connector, M12, Axial, Male, A-coded, 5 -pin Connection 3: Connector, M12, Axial, Female, A-coded, 8 -pin Shielded: Yes Cable length fork 1: 5,000 mm Cable length fork 2: 150 mm Sheathing material: PUR

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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

Configuration devices

Accessories

 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.
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.

Note

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