

Technical data sheet Light curtain receiver Part no.: 50118773 CML730i-R05-2960.A/L-M12



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 changes

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Technical data

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730
730 Throughbeam principle
Receiver
2x BT-NC sliding block
Detection of transparent objects
Object measurement
Crossed-beam scanning
Diagonal-beam scanning
Parallel-beam scanning
-
0.1 4.5 m
Guaranteed operating range
0.1 1.75 m
0.1 6 m
Typical operating range
2,960 mm
592 Piece(s)
5 mm
10 mm
Polarity reversal protection
Short circuit protected
Transient protection
18 30 V, DC
0 15 %, From U _R
$0 \dots 600 \text{ mA}$, The specified values refer
to the entire package consisting of trans mitter and receiver.
100 mA
6,000 Ω
4 Piece(s)
Inputs/outputs selectable
Inputs/outputs selectable DC
Inputs/outputs selectable
Inputs/outputs selectable DC Typ. U _B / 0 V
Inputs/outputs selectable DC Typ. U _B / 0 V DC
Inputs/outputs selectable DC Typ. U _B / 0 V DC high: ≥6V
Inputs/outputs selectable DC Typ. $U_B / 0 V$ DC high: $\geq 6V$ Iow: $\leq 4 V$
Inputs/outputs selectable DC Typ. U _B / 0 V DC high: ≥6V
Inputs/outputs selectable DC Typ. $U_B / 0 V$ DC high: $\geq 6V$ Iow: $\leq 4 V$
Inputs/outputs selectable DC Typ. $U_B / 0 V$ DC high: $\geq 6V$ low: $\leq 4 V$ 0 1 ms
Inputs/outputs selectable DC Typ. $U_B / 0 V$ DC high: $\geq 6V$ low: $\leq 4 V$ 0 1 ms 450 ms
Inputs/outputs selectable DC Typ. $U_B / 0 V$ DC high: $\ge 6V$ low: $\le 4 V$ 0 1 ms 450 ms 6.07 ms
Inputs/outputs selectable DC Typ. $U_B / 0 V$ DC high: $\geq 6V$ low: $\leq 4 V$ 0 1 ms 450 ms
Inputs/outputs selectable DC Typ. $U_B / 0 V$ DC high: $\ge 6V$ low: $\le 4 V$ 0 1 ms 450 ms 6.07 ms

IO-Link COM mode	COM2
Min. cycle time	COM2 = 2.3 ms
Specification	V1.0.1
	V1.1
ervice interface	
уре	IO-Link
IO-Link Function	Configuration via software
	Service
onnection	
umber of connections	2 Piece(s)
lug outlet	Axial
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
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
lechanical data	
esign	Cubic
imension (W x H x L)	29 mm x 35.4 mm x 3,035 mm
ousing material	Metal
letal housing	Aluminum
ens cover material	Plastic
et weight	3,000 g
ousing color	Silver
ype of fastening	Groove mounting
	Via optional mounting device
peration and display	
ype of display	LED
	OLED display
umber of LEDs	2 Piece(s)
	Software
ype of configuration	Teach-in
ype of configuration	
ype of configuration	Membrane keyboard
perational controls	

Technical data

Certifications

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

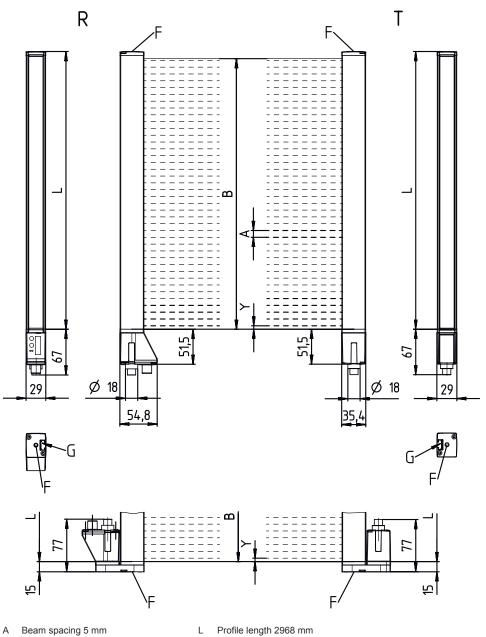
Classification

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



Dimensioned drawings

All dimensions in millimeters



- Beam spacing 5 mm А
- В Measurement field length 2960 mm
- F M6 thread G Fastening groove
- R Receiver

Т

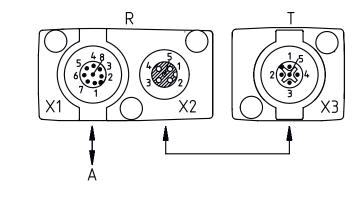
2.5 mm Υ

Transmitter

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Dimensioned drawings





A PWR / SW IN / OUT

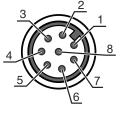
Electrical connection

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

3 GND 4 IO-Link 5 IO2 6 IO3 7 IO4		
3 GND 4 IO-Link 5 IO2 6 IO3 7 IO4	1	V+
4 IO-Link 5 IO2 6 IO3 7 IO4	2	101
5 IO2 6 IO3 7 IO4	3	GND
6 103 7 104	4	IO-Link
7 104	5	IO2
	6	IO3
8 GND	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-



Operation and display

Meaning

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
50118612	CML730i-T05- 2960.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: 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
DDD	Special equipment -PS: Power Setting
EEE	Electrical connection M12: M12 connector
FFF	-EX: Explosion protection
Note	
6 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.

b 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
1	∜ F ∜ T C

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 unit

	Part no.	Designation	Article	Description
C. L. LINE	50144900	MD 798i-11-82/L5- 2222	IO-Link master	Type: IO-Link master Current consumption, max.: 11,000 mA Switching outputs for each sensor connection: 1 Piece(s) Switching output: Transistor, PNP Interface: IO-Link, Automatic protocol detection, EtherNet IP, Modbus TCP, PROFINET Connections: 12 Piece(s) Sensor connections: 8 Piece(s) Connections for voltage supply: 2 Piece(s) Interface connections: 2 Piece(s) Degree of protection: IP 67, IP 65, IP 69K

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 Connector, LED: No 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: 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

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Mounting technology - Mounting brackets

Accessories

	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
Rea	429393	BT-2HF	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.
	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.

