Leuze

Technical data sheet Light curtain receiver Part no.: 50119210 CML730i-R40-2850.R/L-M12



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Technical data

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Series730Operating principleThroughbeam principleDevice typeReceiverContainsAccessories for the use of the BT-ApplicationDetection of transparent objects Object measurementSpecial versionCrossed-beam scanning Diagonal-beam scanning Parallel-beam scanningOptical dataCoperating rangeOperating rangeGuaranteed operating rangeOperating range0.3 9.5 mOperating range limit0.2 12 mMeasurement field length Number of beams2,850 mmNumber of beams71 Piece(s)Beam spacing40 mmMeasurement data50 mm	2R1
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Measurement data	
Electrical data	
Protective circuit Polarity reversal protection	
Short circuit protected	
Transient protection	
Performance data	
Supply voltage U _B 18 30 V, DC	
Residual ripple 0 15 %, From U _B	
Open-circuit current 0 435 mA, The specified values to the entire package consisting of mitter and receiver.	
Inputs/outputs selectable	
Output current, max. 100 mA	
Input resistance 6,000 Ω	
Number of inputs/outputs selectable 4 Piece(s)	
Type Inputs/outputs selectable	
Voltage type, outputs DC	
Switching voltage, outputs Typ. U _B / 0 V	
Voltage type, inputs DC	
Switching voltage, inputs high: ≥6V Iow: ≤4V	
Input/output 1	
Activation/disable delay 0 1 ms	
Timing	
Timing Readiness delay 450 ms	
•	
Readiness delay 450 ms	
Readiness delay 450 ms Cycle time 1 ms	

IO-Link	
COM mode	COM2
Specification	V1.0.1
	V1.1
Min. cycle time	COM2 = 2.3 ms
Service interface	
Гуре	IO-Link
IO-Link Function	Configuration via software
Function	Service
Connection	
Number of connections	2 Piece(s)
Plug outlet	2 Field(s) Rear side
ing onlier	
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 Encoding	5 -pin A-coded
	A-coueu
Mechanical data	
Design Dimension (W x H x L)	Cubic 29 mm x 35.4 mm x 2,903 mm
Housing material	Metal
Metal housing	Aluminum
_ens cover material	Plastic
Net weight	2,950 g
Housing color	Silver
Type of fastening	Groove mounting
lype of factoring	Via optional mounting device
Operation and display	
Type of display	LED
. Jet of aloping	OLED display
Number of LEDs	2 Piece(s)
Type of configuration	Software
Operational controls	Teach-in Mombrane keybeard
Operational controls	Membrane keyboard
Environmental data	
Ambient temperature, operation Ambient temperature, storage	-30 60 °C -40 70 °C

Technical data

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Certifications

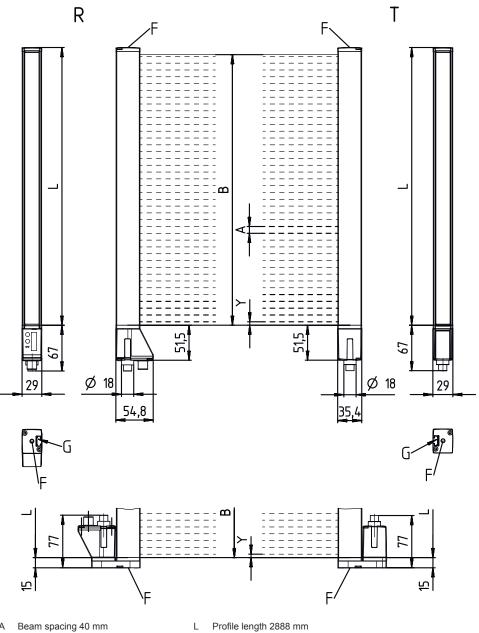
IP 65
III
c CSA US
IEC 60947-5-2

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 40 mm А

Fastening groove

- В Measurement field length 2850 mm
- F M6 thread

G

- R Receiver
 - Υ 5 mm

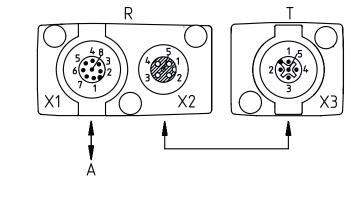
Transmitter

Т



Dimensioned drawings





A PWR / SW IN / OUT

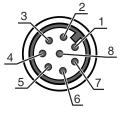
Electrical connection

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+
I V+
2 IO1
3 GND
4 IO-Link
5 IO2
6 IO3
7 104
8 GND

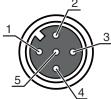


Connection 2

Connection to transmitter
Connector
M12
Female
Metal
5 -pin
A-coded

Pin Pin assignment

1	FE/SHIELD
2	V+
3	GND
4	RS 485 Tx+
5	RS 485 Tx-



Operation and display

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
50118992	CML730i-T40-	Light curtain	Operating range: 0.3 9.5 m
	2850.R-M12	transmitter	Connection: Connector, M12, Rear side, 5 -pin

Part number code

Part designation: CML7XXi-YZZ-AAAA.BCCCDDD-EEEFFF

1	Note
FFF	-EX: Explosion protection
EEE	Electrical connection M12: M12 connector
DDD	Special equipment -PS: Power Setting
CCC	Interface L: IO-Link /CN: CANopen /PB: PROFIBUS /PN: PROFINET /CV: Analog current and voltage output /D3: RS 485 Modbus
В	Equipment A: connector outlet, axial R: rear connector outlet
AAAA	Measurement field length [mm], dependent on beam spacing
ZZ	Beam spacing 05: 5 mm 10: 10 mm 20: 20 mm 40: 40 mm
Y	Device type T: transmitter R: receiver
7XXi	Series 720i: 720i series 730i: 730i series
CML	Operating principle Measuring light curtain

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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.

	For UL applications:
A	 ^t For UL applications, use is only permitted in Class 2 circuits in accordance with the NEC (National Electric Code). ^t 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
ęr.	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
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.