## **Technical data sheet** Light curtain transmitter Part no.: 50129030 CSL710-T10-2880.A-M12





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## **Technical data**

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#### Basic data

Basic data	
Series	710
Operating principle	Throughbeam principle
Device type	Transmitter
Application	Precise object detection
Special version	
Special version	Crossed-beam scanning
	Diagonal-beam scanning
	Parallel-beam scanning
Optical data	
Operating range	Guaranteed operating range
Operating range	0.3 7 m
Operating range limit	Typical operating range
Dperating range limit	0.2 9 m
leasurement field length	2,880 mm
Number of beams	288 Piece(s)
Beam spacing	10 mm
light source	LED, Infrared
Vavelength	940 nm
Measurement data	
linimum object diameter	20 mm
Electrical data	
Protective circuit	Polarity reversal protection
	Short circuit protected
	Transient protection
Performance data	
Supply voltage U <sub>B</sub>	18 30 V, DC
Residual ripple	0 15 %, From U <sub>R</sub>
Open-circuit current	<ul> <li>0 600 mA, The specified values refer to the entire package consisting of trans mitter and receiver.</li> </ul>
Time behavior	
Readiness delay	400 ms
-	400 ms 9.04 ms
Cycle time	
Cycle time	9.04 ms
Cycle time Connection Number of connections	
Readiness delay Cycle time Connection Number of connections Plug outlet	9.04 ms 1 Piece(s)
Cycle time Connection Number of connections Plug outlet Connection 1	9.04 ms 1 Piece(s) Axial
Cycle time Connection Number of connections Plug outlet	9.04 ms 1 Piece(s) Axial Connection to receiver
Connection Iumber of connections Iug outlet Connection 1	9.04 ms 1 Piece(s) Axial Connection to receiver Sync-input
Cycle time Connection Number of connections Plug outlet Connection 1	9.04 ms 1 Piece(s) Axial Connection to receiver

M12

Male

Metal

5 -pin

A-coded

#### Mechanical data

Design	Cubic
Dimension (W x H x L)	29 mm x 35.4 mm x 2,953 mm
Housing material	Metal
Metal housing	Aluminum
Lens cover material	Plastic / PMMA
Net weight	2,850 g
Housing color	Red
Type of fastening	Groove mounting
	Via optional mounting device
Operation and display	
Type of display	LED
Number of LEDs	1 Piece(s)
Environmental data	
Ambient temperature, operation	-30 60 °C
Ambient temperature, storage	-40 70 °C
Certifications	
Degree of protection	IP 65
Protection class	III
Certifications	c CSA 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 12.0 ECLASS 13.0	27270910 27270910
ECLASS 13.0	27270910
ECLASS 13.0 ETIM 5.0	27270910 EC002549

Thread size

Туре

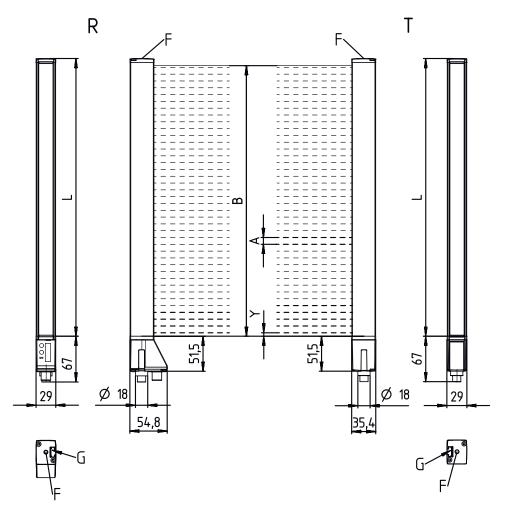
Material

No. of pins

Encoding

## **Dimensioned drawings**

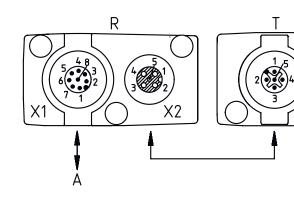
All dimensions in millimeters



- Beam spacing 10 mm А
- В Measurement field length 2880 mm
- F M6 thread
- G Fastening groove
- Profile length 2888 mm L

X3

- Transmitter Т
- R Receiver
- Y



PWR / SW IN / OUT А



## **Electrical connection**

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#### **Connection 1**

Function	Connection to receiver
	Sync-input
	Voltage supply
Type of connection	Connector
Thread size	M12
Туре	Male
Material	Metal
No. of pins	5 -pin
Encoding	A-coded

#### **Pin assignment**

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

## **Operation and display**

LED	Display	Meaning
1	Green, continuous light	Continuous mode
	Off	No communication with the receiver / waiting for trigger
	green, flashing in sync with the measurement	Measurement frequency display

#### Suitable receivers

 Part no.	Designation	Article	Description
50128946	CSL710-R10-2880.A/ L-M12	Light curtain receiver	Application: Precise object detection Special version: Parallel-beam scanning, Crossed-beam scanning, Diagonal- beam scanning Operating range: 0.3 7 m Selectable inputs/outputs: 4 Piece(s) Service interface: IO-Link Connection: Connector, M12, 8 -pin

### Part number code

Part designation: CSL710-XYY-ZZZZ.A/B-CCC

CSL710	Operating principle CSL: switching light curtain of the 710 series
x	Function classes T: transmitter R: receiver
YY	Beam spacing 05: 5 mm 10: 10 mm 20: 20 mm 40: 40 mm
2222	Measurement field length [mm], dependent on beam spacing Value, see technical data

### Part number code



Α	Equipment A: Axial connector outlet		
В	Interface L: IO-Link		
CCC	Electrical connection M12: M12 connector		
	Note		
	t A list with all available device types can be found on the Leuze website at www.leuze.com.		

### Notes

Observe intended use!
b 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.

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#### 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 - 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

#### Note

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