## SMART SENSOR BUSINESS

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Part no.: 50129037 CSL710-T20-1110.A-M12 Light curtain transmitter



Figure can vary

# Contents

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## Part no.: 50129037 – CSL710-T20-1110.A-M12 – Light curtain transmitter

#### **Technical data**

Basic data			
Series	710		
Operating principle	Throughbeam principle		
Device type	Transmitter		
Contains	2x BT-NC sliding block		
Application	Precise object detection		
Optical data			
Operating range	Guaranteed operating range		
Operating range	0.3 7 m		
Operating range limit	Typical operating range		
Operating range limit	0.2 9 m		
Measurement field length	1,110 mm		
Number of beams	56 Piece(s)		
Beam spacing	20 mm		
Light source	LED , Infrared		
LED light wavelength	940 nm		
Measurement data			
Minimum object diameter	30 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 <sub>B</sub>		
Open-circuit current	0 270 mA , The specified values refer to the entire package consisting of transmitter and receiver.		
Timing			
Readiness delay	400 ms		
Cycle time	33.7 ms		
Connection			
Number of connections	1 Piece(s)		
Number of connections Plug outlet	1 Piece(s) Axial		
Number of connections Plug outlet Connection 1	Axial		
Number of connections Plug outlet Connection 1 Type of connection	Axial Connector		
Number of connections Plug outlet Connection 1	Axial		
Number of connections Plug outlet Connection 1 Type of connection	Axial Connector Connection to receiver Sync-input		
Number of connections Plug outlet Connection 1 Type of connection Function	Axial Connector Connection to receiver Sync-input Voltage supply		
Number of connections Plug outlet Connection 1 Type of connection Function Thread size	Axial Connector Connection to receiver Sync-input Voltage supply M12		
Number of connections Plug outlet Connection 1 Type of connection Function Thread size Type	Axial Connector Connection to receiver Sync-input Voltage supply M12 Male		

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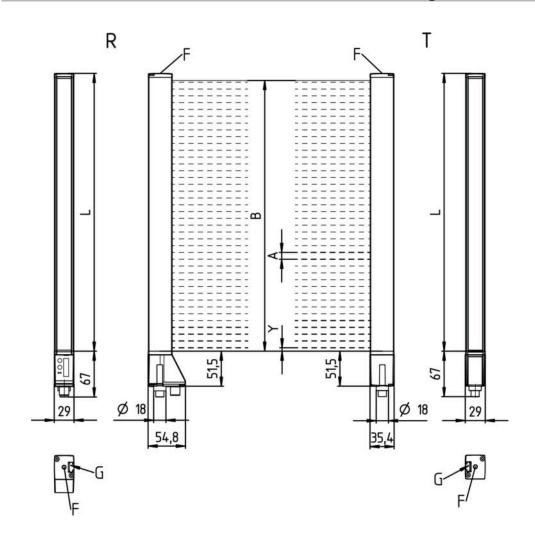
Mechanical data			
Design	Cubic		
Dimension (W x H x L)	29 mm x 35.4 mm x 1,193 mm		
Housing material	Metal , Aluminum		
Lens cover material	Plastic / PMMA		
Net weight	1,250 g		
Housing color	Red		
Type of fastening	Groove mounting Via optional mounting device		
Operation and display			
Type of display	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			
Certifications	c CSA US		
Standards applied	IEC 60947-5-2		
Classification			
Customs tariff number	90314990		
eCl@ss 8.0	27270910		
eCl@ss 9.0	27270910		
ETIM 5.0	EC002549		
ETIM 6.0	EC002549		

### **Dimensioned drawings**

All dimensions in millimeters

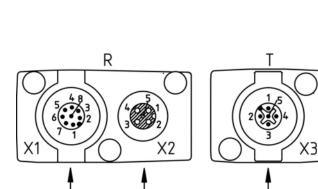
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A Beam spacing 20 mm

- B Measurement field length 1110 mm
- F M6 thread
- G Fastening groove
- L Profile length 1128 mm
- T Transmitter
- **R** Receiver
- Υ



A PWR / SW IN/OUT

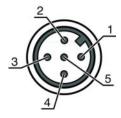
A

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#### **Electrical connection**

Connection 1	
Type of connection	Connector
Function	Connection to receiver Sync-input Voltage supply
Thread size	M12
Туре	Male
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**

#### LEDs

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
50128954	CSL710-R20-1110.A/ L-M12	Light curtain receiver	Application: Precise object detection 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
Х	Function classes: T: transmitter R: receiver

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YY	Beam spacing: 05: 5 mm 10: 10 mm 20: 20 mm 40: 40 mm
ZZZZ	Measurement field length [mm], dependent on beam spacing: Value, see technical data
A	Equipment: A: connector outlet, axial
В	Interface: L: IO-Link
CCC	Electrical connection: M12: M12 connector

Note

A list with all available device types can be found on the Leuze electronic 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.
- 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 - Interconnection cables

F	Part no.	Designation	Article	Description
50			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 - Swivel mounts

	Part no.	Designation	Article	Description
ęł.	429046	BT-2R1	Mounting bracket 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

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Note

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