### **Technical data sheet Light curtain transmitter** Part no.: 50129000 CSL710-T05-2000.A-M12



## Leuze

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#### **Technical data**

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Basic data			
Series	710		
Operating principle	Throughbeam principle		
Device type	Transmitter		
Application	Precise object detection		
Special design			
Special design	Crossed-beam scanning		
	Diagonal-beam scanning		
	Parallel-beam scanning		
Optical data			
Operating range	Guaranteed operating range		
Operating range	0.1 3.5 m		
Operating range limit	Typical operating range		
Operating range limit	0.1 4.5 m		
Measurement field length	2,000 mm		
Number of beams	400 Piece(s)		
Beam spacing	5 mm		
Light source	LED, Infrared		
ED light wavelength	940 nm		
Measurement data			
Minimum object diameter	10 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>B</sub>		
Open-circuit current	0 435 mA, The specified values refer to the entire package consisting of trans mitter and receiver.		
Timing			
Readiness delay	400 ms		
Cycle time	12.4 ms		
Connection			
Number of connections	1 Piece(s)		
Plug outlet	Axial		

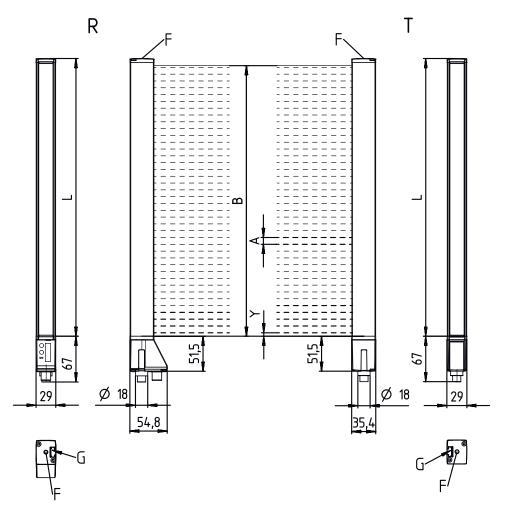
Connection 1	
Function	Connection to receiver
	Sync-input
	Voltage supply
Type of connection	Connector
Thread size	M12
Туре	Male
Material	Metal
No. of pins	5 -pin
Encoding	A-coded
Mechanical data	
Design	Cubic
Dimension (W x H x L)	29 mm x 35.4 mm x 2,073 mm
Housing material	Metal, Aluminum
Lens cover material	Plastic / PMMA
Net weight	2,050 g
Housing color	Red
Type of fastening	Groove mounting
	Via optional mounting device
Operation and display	Via optional mounting device
Operation and display Type of display	Via optional mounting device
Type of display	LED
Type of display Number of LEDs Environmental data	LED
Type of display Number of LEDs	LED 1 Piece(s)
Type of display Number of LEDs Environmental data Ambient temperature, operation	LED 1 Piece(s) -30 60 °C
Type of display Number of LEDs Environmental data Ambient temperature, operation Ambient temperature, storage Certifications	LED 1 Piece(s) -30 60 °C
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Type of display Number of LEDs Environmental data Ambient temperature, operation Ambient temperature, storage Certifications Degree of protection Protection class	LED 1 Piece(s) -30 60 °C -40 70 °C IP 65
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Type of display Number of LEDs Environmental data Ambient temperature, operation Ambient temperature, storage Certifications Degree of protection Protection class Certifications Standards applied Classification Customs tariff number eCl@ss 8.0	LED 1 Piece(s) -30 60 °C -40 70 °C IP 65 III c CSA US IEC 60947-5-2 90314990
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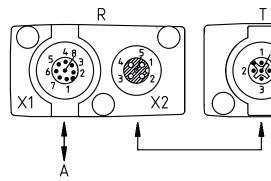
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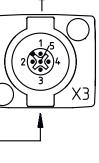
#### **Dimensioned drawings**

All dimensions in millimeters



- Beam spacing 5 mm А
- В Measurement field length 2000 mm
- F M6 thread
- G Fastening groove
- Profile length 2008 mm L
- 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
50128912	CSL710-R05-2000.A/ L-M12	Light curtain receiver	Application: Precise object detection Special design: Parallel-beam scanning, Crossed-beam scanning, Diagonal- beam scanning Operating range: 0.1 3.5 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: 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 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.

# For UL applications: Image: Second system Image: Second system

 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: 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
ęę.	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

#### Accessories





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