Technical data sheet Light curtain transmitter Part no.: 50128999 CSL710-T05-1920.A-M12





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Technical data

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Basic data				
Series	710			
Operating principle	Throughbeam principle			
Device type	Transmitter			
Contains	2x BT-NC sliding block			
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	1,920 mm			
Number of beams	384 Piece(s)			
Beam spacing	5 mm			
Light source	LED, Infrared			
LED 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 _B	18 30 V, DC			
Residual ripple	0 15 %, From U _B			
Open-circuit current	 435 mA, The specified values refer to the entire package consisting of trans mitter and receiver. 			
Timing				
Readiness delay	400 ms			
Cycle time	11.92 ms			
Connection				
Number of connections	1 Piece(s)			
	/			

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 1,993 mm		
Housing material	Metal, Aluminum		
Lens cover material	Plastic / PMMA		
Net weight	2,000 g		
Housing color	Red		
Type of fastening	Groove mounting		
	Via optional mounting device		
Operation and display			
Type of display	LED		
	LED 1 Piece(s)		
Type of display			
Type of display Number of LEDs			
Type of display Number of LEDs Environmental data	1 Piece(s)		
Type of display Number of LEDs Environmental data Ambient temperature, operation	1 Piece(s) -30 60 °C		
Type of display Number of LEDs Environmental data Ambient temperature, operation Ambient temperature, storage	1 Piece(s) -30 60 °C		
Type of display Number of LEDs Environmental data Ambient temperature, operation Ambient temperature, storage Certifications	1 Piece(s) -30 60 °C -40 70 °C		
Type of display Number of LEDs Environmental data Ambient temperature, operation Ambient temperature, storage Certifications Degree of protection	1 Piece(s) -30 60 °C -40 70 °C IP 65		
Type of display Number of LEDs Environmental data Ambient temperature, operation Ambient temperature, storage Certifications Degree of protection Protection class	1 Piece(s) -30 60 °C -40 70 °C IP 65 III		
Type of display Number of LEDs Environmental data Ambient temperature, operation Ambient temperature, storage Certifications Degree of protection Protection class Certifications	1 Piece(s) -30 60 °C -40 70 °C IP 65 III c CSA US		
Type of display Number of LEDs Environmental data Ambient temperature, operation Ambient temperature, storage Certifications Degree of protection Protection class Certifications Standards applied	1 Piece(s) -30 60 °C -40 70 °C IP 65 III c CSA US		
Type of display Number of LEDs Environmental data Ambient temperature, operation Ambient temperature, storage Certifications Degree of protection Protection class Certifications Standards applied Classification	1 Piece(s) -30 60 °C -40 70 °C IP 65 III c CSA US IEC 60947-5-2		
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	1 Piece(s) -30 60 °C -40 70 °C IP 65 III c CSA US IEC 60947-5-2 90314990		
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	1 Piece(s) -30 60 °C -40 70 °C IP 65 III c CSA US IEC 60947-5-2 90314990 27270910		

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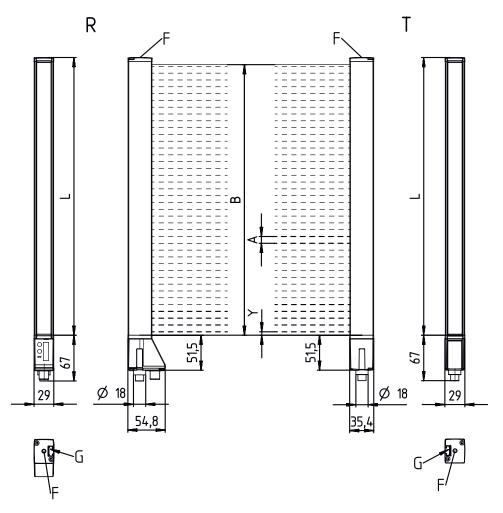
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Plug outlet

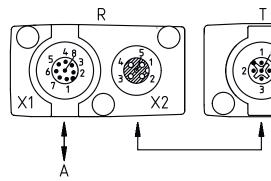
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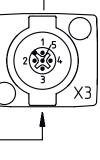
Dimensioned drawings

All dimensions in millimeters



- Beam spacing 5 mm А
- В Measurement field length 1920 mm
- F M6 thread
- G Fastening groove
- Profile length 1928 mm L
- Transmitter Т
- R Receiver
- Y





PWR / SW IN/OUT А

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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
50128911	CSL710-R05-1920.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
Х	Function classes T: transmitter R: receiver
YY	Beam spacing 05: 5 mm 10: 10 mm 20: 20 mm 40: 40 mm
<u>ZZZZ</u>	Measurement field length [mm], dependent on beam spacing Value, see technical data

Part number code



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 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.
<u></u>	∜ 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

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