Technical data sheet Light curtain transmitter Part no.: 50128994 CSL710-T05-1520.A-M12





Leuze electronic GmbH + Co. KG info@leuze.com • www.leuze.com The Sensor People In der Braike 1, 73277 Owen

Phone: +49 7021 573-0 • Fax: +49 7021 573-199

Technical data

Leuze

Basic data

Basic data		
Series	710	
Operating principle	Throughbeam principle	
Device type	Transmitter	
Contains	2x BT-NC sliding block	
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	0.1 3.5 m	
Operating range limit	Typical operating range	
Operating range limit	0.1 4.5 m	
Measurement field length	1,520 mm	
Number of beams	304 Piece(s)	
Beam spacing	5 mm	
Light source	LED, Infrared	
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	 350 mA, The specified values refer to the entire package consisting of trans mitter and receiver. 	
Time behavior		
Time behavior Readiness delay	400 ms	

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

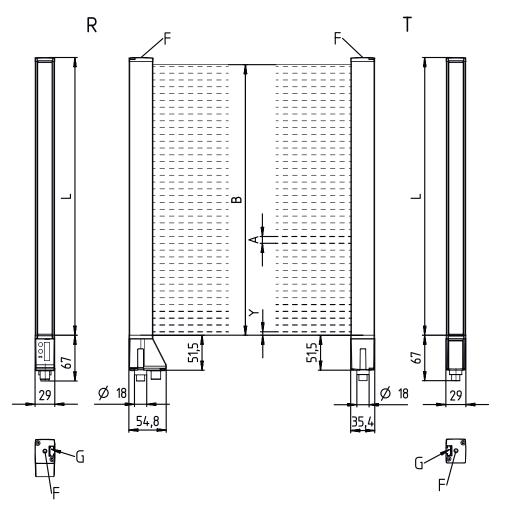
Design	Cubic
Dimension (W x H x L)	29 mm x 35.4 mm x 1,593 mm
Housing material	Metal
Metal housing	Aluminum
Lens cover material	Plastic / PMMA
Net weight	1,600 g
Housing color	Red
Type of fastening	Groove mounting
	Via optional mounting device
Operation and display	
Type of display	LED
Number of LEDs	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
Protection class Certifications	ni c CSA US
Certifications	c CSA US
Certifications Standards applied	c CSA US
Certifications Standards applied Classification	c CSA US IEC 60947-5-2
Certifications Standards applied Classification Customs tariff number	c CSA US IEC 60947-5-2 90314990
Certifications Standards applied Classification Customs tariff number ECLASS 5.1.4	c CSA US IEC 60947-5-2 90314990 27270910
Certifications Standards applied Classification Customs tariff number ECLASS 5.1.4 ECLASS 8.0	c CSA US IEC 60947-5-2 90314990 27270910 27270910
Certifications Standards applied Classification Customs tariff number ECLASS 5.1.4 ECLASS 8.0 ECLASS 9.0	c CSA US IEC 60947-5-2 90314990 27270910 27270910 27270910 27270910
Certifications Standards applied Classification Customs tariff number ECLASS 5.1.4 ECLASS 8.0 ECLASS 9.0 ECLASS 10.0	c CSA US IEC 60947-5-2 90314990 27270910 27270910 27270910 27270910 27270910
Certifications Standards applied Classification Customs tariff number ECLASS 5.1.4 ECLASS 8.0 ECLASS 9.0 ECLASS 10.0 ECLASS 11.0	c CSA US IEC 60947-5-2 90314990 27270910 27270910 27270910 27270910 27270910 27270910 27270910
Certifications Standards applied Classification Customs tariff number ECLASS 5.1.4 ECLASS 8.0 ECLASS 9.0 ECLASS 10.0 ECLASS 11.0 ECLASS 12.0	c CSA US IEC 60947-5-2 90314990 27270910 27270910 27270910 27270910 27270910 27270910 27270910 27270910
Certifications Standards applied Classification Customs tariff number ECLASS 5.1.4 ECLASS 8.0 ECLASS 9.0 ECLASS 10.0 ECLASS 11.0 ECLASS 12.0 ECLASS 13.0	c CSA US IEC 60947-5-2 90314990 27270910 27270910 27270910 27270910 27270910 27270910 27270910 27270910 27270910
Certifications Standards applied Classification Customs tariff number ECLASS 5.1.4 ECLASS 8.0 ECLASS 9.0 ECLASS 9.0 ECLASS 10.0 ECLASS 11.0 ECLASS 12.0 ECLASS 12.0 ECLASS 13.0 ETIM 5.0	c CSA US IEC 60947-5-2 90314990 27270910 27270910 27270910 27270910 27270910 27270910 27270910 27270910 27270910 27270910 EC002549

 The Sensor People
 In der Braike 1, 73277 Owen
 Phone: +49 7021 573-0 • Fax: +49 7021 573-199
 eng • 2023-02-03

Leuze electronic GmbH + Co. KG info@leuze.com • www.leuze.com

Dimensioned drawings

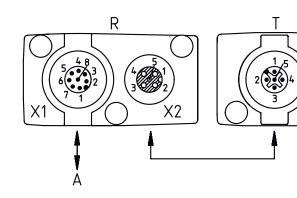
All dimensions in millimeters



- Beam spacing 5 mm А
- В Measurement field length 1520 mm
- F M6 thread
- G Fastening groove
- Profile length 1528 mm L

X3

- Transmitter Т
- R Receiver
- Y



PWR / SW IN / OUT А

3/5

Leuze

Electrical connection

Leuze

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	<u>2</u>	2
1	FE/SHIELD		1
2	V+		
3	GND	3	
4	RS 485 Tx+	N N	\searrow
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
50128906	CSL710-R05-1520.A/ L-M12	Light curtain receiver	Application: Precise object detection Special version: 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
7777	Measurement field length [mm], dependent on beam spacing Value, see technical data

Part number code



А	Equipment A: Axial connector outlet	
В	Interface L: IO-Link	
CCC	Electrical connection M12: M12 connector	
	Note	

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.

~		
	4	
	-	

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.