

# **Technical data sheet Light curtain transmitter**

Part no.: 50129052

CSL710-T40-1250.A-M12



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### **Technical data**



### 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	0.3 7 m
Operating range limit	Typical operating range
Operating range limit	0.2 9 m
Measurement field length	1,250 mm
Number of beams	32 Piece(s)
Beam spacing	40 mm
Light source	LED, Infrared
LED light wavelength	940 nm

#### Measurement data

Minimum object diameter	50 mm	

### **Electrical data** Protective circuit

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	Transient protection
Performance data	
Supply voltage U <sub>B</sub>	18 30 V, DC

Polarity reversal protection Short circuit protected

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	1.36 ms

### Connection

Number of connections	1 Piece(s)
Plug outlet	Axial

Connection 1
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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 1,353 mm
Housing material	Metal, Aluminum
Lens cover material	Plastic / PMMA
Net weight	1,400 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

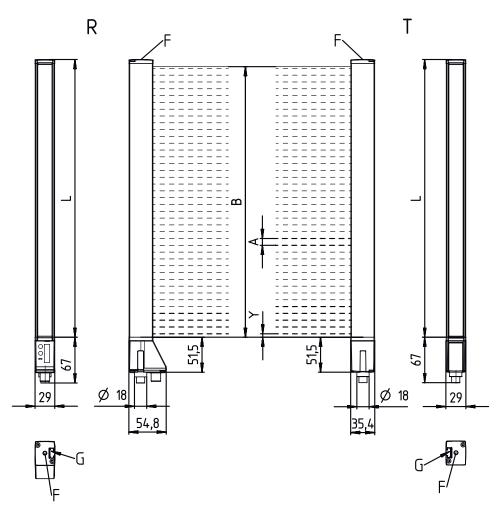
### Classification

Customs tariff number	90314990
eCI@ss 8.0	27270910
eCI@ss 9.0	27270910
ETIM 5.0	EC002549
ETIM 6.0	EC002549

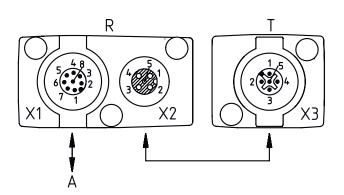
### **Dimensioned drawings**

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All dimensions in millimeters



- Beam spacing 40 mm
- В Measurement field length 1250 mm
- M6 thread
- G Fastening groove
- Profile length 1288 mm
- Transmitter
- Receiver



PWR / SW IN/OUT

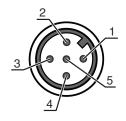
### **Electrical connection**



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



## **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
50128970	CSL710-R40-1250.A/ L-M12	Light curtain receiver	Application: Precise object detection Special design: 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
ZZZZ	Measurement field length [mm], dependent on beam spacing Value, see technical data

### Part number code



A Equipment

A: connector outlet, axial

B Interface

L: IO-Link

CCC Electrical cor

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.
- 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

	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
EE.	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**



### Note



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