



the sensor people





Figure can vary

Part no.: 50129047 CSL710-T20-2710.A-M12 Light curtain transmitter





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### **Technical data**

Pagin data		
Basic data	740	
Series	710	
Operating principle	Throughbeam principle	
Device type	Transmitter	
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	2,710 mm	
Number of beams	136 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	Transistic procession	
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 con-	
Open-circuit current	sisting of transmitter and receiver.	
Timing		
Readiness delay	400 ms	
Cycle time	4.48 ms	
Connection		
Number of connections	1 Piece(s)	
Plug outlet	Axial	
Connection 1		
Type of connection Connector		
Function	Connection to receiver	
	Sync-input Voltage supply	
Thread size	M12	
Type	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 2,793 mm
Housing material	Metal , Aluminum
Lens cover material	Plastic / PMMA
Net weight	2,700 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

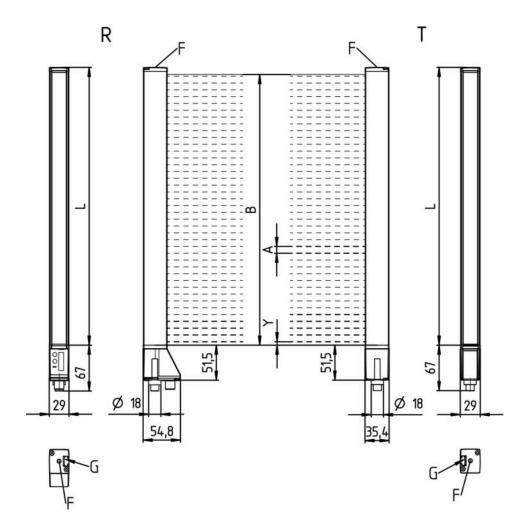
Certifications	
Degree of protection	IP 65
Protection class	III
Certifications	c CSA US
Standards applied	IEC 60947-5-2

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

### **Dimensioned drawings**

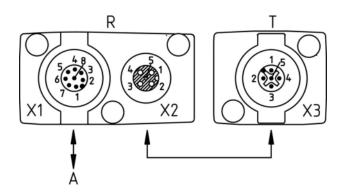
All dimensions in millimeters





- A Beam spacing 20 mm
- B Measurement field length 2710 mm
- F M6 thread
- G Fastening groove
- L Profile length 2728 mm
- T Transmitter
- R Receiver





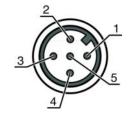
APWR / SW IN/OUT



#### **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
1		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
50128964	CSL710-R20-2710.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	
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	
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

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