



the sensor people





Figure can vary

Part no.: 50129045 CSL710-T20-2390.A-M12 Light curtain transmitter





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#### **Technical data**

Basic data			
Series	710		
Operating principle  Device type	Throughbeam principle  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	2,390 mm		
Number of beams	120 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			
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-		
	sisting of transmitter and receiver.		
Timing  Readinger delay	400 mg		
Readiness delay	400 ms		
Cycle time	4 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		
Туре	Male		
Material	Metal		
No. of pins	5 -pin		
Encoding	A-coded		
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Design Cubic		
Dimension (W x H x L)	29 mm x 35.4 mm x 2,473 mm	
Housing material	Metal , Aluminum	
Lens cover material Plastic / PMMA		
Net weight 2,400 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	

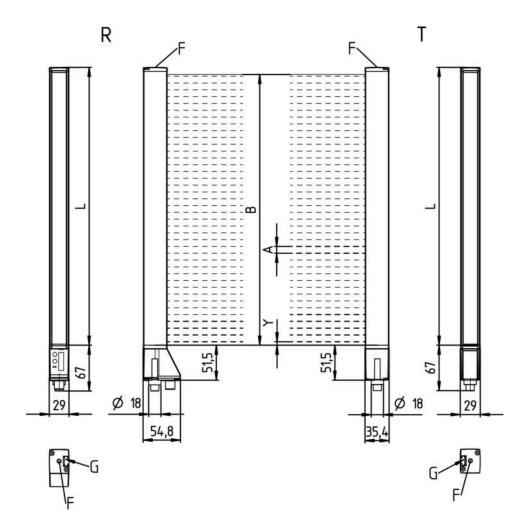
Certifications		
Degree of protection	IP 65	
Protection class	III	
Certifications	c CSA US	
Standards applied	IEC 60947-5-2	

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

# **Dimensioned drawings**

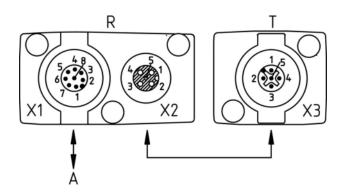
All dimensions in millimeters





- A Beam spacing 20 mm
- B Measurement field length 2390 mm
- F M6 thread
- G Fastening groove
- L Profile length 2408 mm
- T Transmitter
- R Receiver





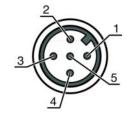
APWR / SW IN/OUT



#### **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
50128962	CSL710-R20-2390.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	

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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
А	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.