



the sensor people





Figure can vary

Part no.: 50129030 CSL710-T10-2880.A-M12 Light curtain transmitter





# **Contents**

- Technical data
- Dimensioned drawings
- Electrical connection
- · Operation and display
- Suitable receivers
- · Part number code
- Notes
- Accessories



#### **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	2,880 mm
Number of beams	288 Piece(s)
Beam spacing	10 mm
Light source	LED , Infrared
LED light wavelength	940 nm
Measurement data	
Minimum object diameter	20 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	0 600 mA , The specified values refer to the entire package consisting of transmitter and receiver.
-	
Timing  Deadings delay	400 ma
Readiness delay	400 ms
Cycle time	9.04 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
	*****



Design Cubic	
Dimension (W x H x L)	29 mm x 35.4 mm x 2,953 mm
Housing material	Metal , Aluminum
Lens cover material Plastic / PMMA	
Net weight 2,850 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	

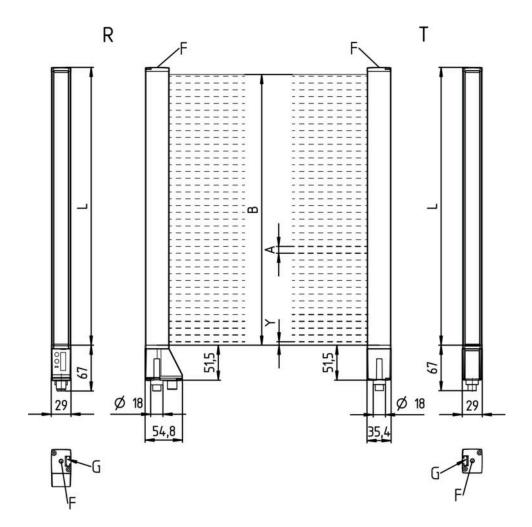
Certifications	
Degree of protection	IP 65
Protection class	III
Certifications	c CSA US
Standards applied	IEC 60947-5-2

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**

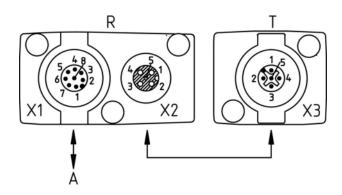
All dimensions in millimeters





- A Beam spacing 10 mm
- B Measurement field length 2880 mm
- F M6 thread
- G Fastening groove
- L Profile length 2888 mm
- T Transmitter
- R Receiver





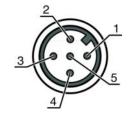
APWR / SW IN/OUT



#### **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
50128946	CSL710-R10-2880.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	
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
		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.