#### **Technical data sheet** Light curtain transmitter Part no.: 50129005 CSL710-T05-2400.A-M12



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## Leuze

#### **Technical data**

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Basic data	
Series	710
Operating principle	Throughbeam principle
Device type	Transmitter
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	0.1 3.5 m
Operating range limit	Typical operating range
Operating range limit	0.1 4.5 m
Measurement field length	2,400 mm
Number of beams	480 Piece(s)
Beam spacing	5 mm
Light source	LED, Infrared
ED light 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 <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 consisting of trans mitter and receiver.
Timing	
Readiness delay	400 ms
Cycle time	14.8 ms
Connection	
Number of connections	1 Piece(s)
Plug outlet	Axial

Connection	
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 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 EC002549

**Connection 1** 

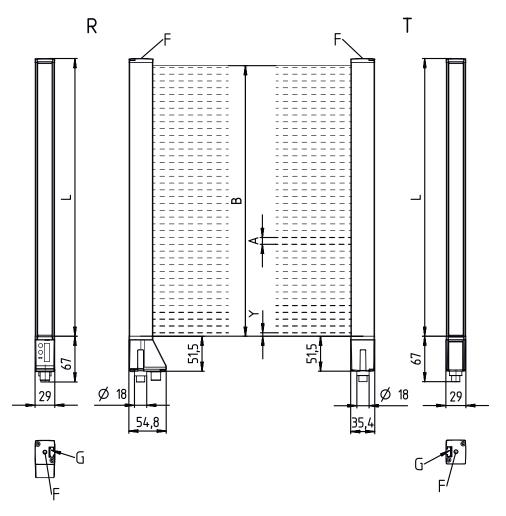
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#### **Dimensioned drawings**

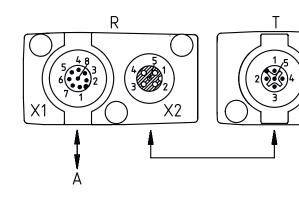
All dimensions in millimeters



- A Beam spacing 5 mm
- B Measurement field length 2400 mm
- F M6 thread
- G Fastening groove
- L Profile length 2408 mm

X3

- T Transmitter
- R Receiver
- Y



A PWR / SW IN/OUT



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#### **Electrical connection**

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#### **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		2
1	FE/SHIELD		
2	V+		
3	GND	<u>3</u>	
4	RS 485 Tx+		
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
50128917	CSL710-R05-2400.A/ L-M12	Light curtain receiver	Application: Precise object detection Special design: 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



Α	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 website at www.leuze.com.

#### Notes

	Observe intended use!
	b 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: Image: Second system Image: Second system

 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
ęę.	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





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