



the sensor people





Figure can vary

Part no.: 50129002 CSL710-T05-2160.A-M12 Light curtain transmitter





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- Technical data
- Dimensioned drawings
- · Electrical connection
- · Operation and display
- Suitable receivers
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Technical data

Series 710 Operating principle Throughbeam principle Orvice type Transmitter Application Precise object detection Optical data Operating range Guaranteed operating range Operating range 0.13.5 m Operating range 10.13.5 m Measurement field length 2.160 mm Number of beams 432 Price(s) Beam spacing 6 mm Light source 1.ED, Infrared LED light wavelength 940 nm Measurement data Minimum object diameter 10 mm Measurement data Protective circuit Polarity reversal protection Short circuit protected Transmitter protection Short circuit protected Transmitter and receiver. Performance data Supply voltage Un 1830 V, DC Residual ripple 013.5 m, The specified values refer to the entire package consisting of transmitter and receiver. Timing Readiness delay 400 ms Cycle time 13.36 ms Connection Number of connections 1 Piece(s) Plug outlet Axial Connection Number of connection Connection Function Function Connection Procedure Synciential Voltage supply Thread size Mit2 Type Male Material Metal No. of plus 5-pin Encoding A-coded	Basic data		
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Thread size M12 Type Male Material Metal No. of pins 5 -pin		Connection to receiver	
Type Male Material Metal No. of pins 5 -pin		Sync-input Sync-input	
Material Metal No. of pins 5 -pin	Thread size	M12	
No. of pins 5 -pin	Туре	Male	
	Material	Metal	
Encoding A-coded	No. of pins	5 -pin	
	Encoding	A-coded	

Mechanical data



<u>Design</u> Cubic	
Dimension (W x H x L)	29 mm x 35.4 mm x 2,233 mm
Housing material	Metal , Aluminum
Lens cover material	Plastic / PMMA
Net weight	2,200 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	

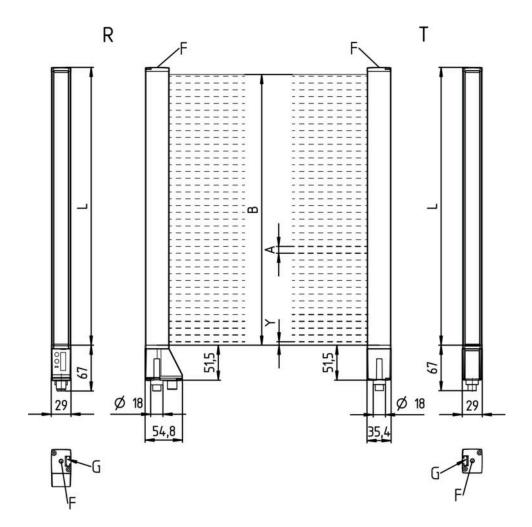
Certifications		
Degree of protection	IP 65	
Protection class	III	
Certifications	c CSA US	
Standards applied	IEC 60947-5-2	

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

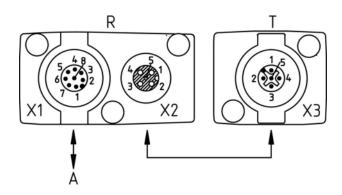
All dimensions in millimeters





- A Beam spacing 5 mm
- B Measurement field length 2160 mm
- F M6 thread
- G Fastening groove
- L Profile length 2168 mm
- T Transmitter
- R Receiver





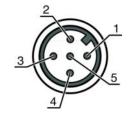
APWR / SW IN/OUT



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
50128914	CSL710-R05-2160.A/ L-M12	Light curtain receiver	Application: Precise object detection 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	

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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.