SMART SENSOR BUSINESS

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Part no.: 50129043 CSL710-T20-2070.A-M12 Light curtain transmitter



Figure can vary

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Technical data

Basic data			
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	2,070 mm		
Number of beams	104 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 _B	18 30 V , DC		
Residual ripple	0 15 % , From U _B		
Open-circuit current	0 435 mA , The specified values refer to the entire package con-		
	sisting of transmitter and receiver.		
Timing			
Readiness delay	400 ms		
Cycle time	3.52 ms		
Connection			
Number of connections	1 Piece(s)		
Plug outlet	Axial		
Connection 1	FAIGI		
Type of connection	Connector		
Function	Connection to receiver		
T unction	Sync-input Voltage supply		
Thread size	M12		
Туре	Male		
Material	Metal		
No. of pins	5 -pin		
	A-coded		

Mechanical data

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Design	Cubic		
Dimension (W x H x L)	29 mm x 35.4 mm x 2,153 mm		
Housing material	Metal , Aluminum		
Lens cover material	Plastic / PMMA		
Net weight	2,150 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			
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		

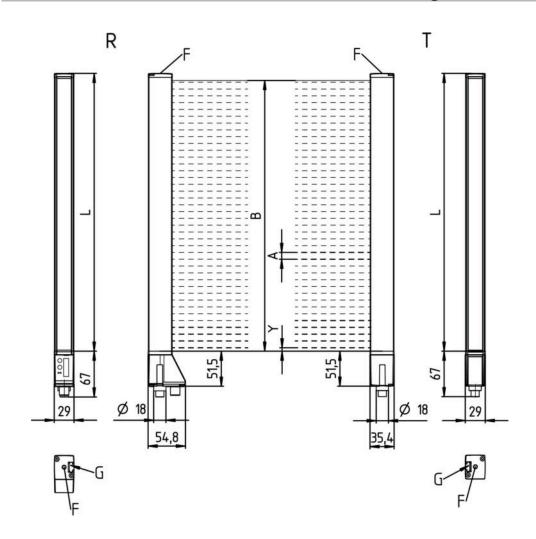
EC002549

Dimensioned drawings

All dimensions in millimeters

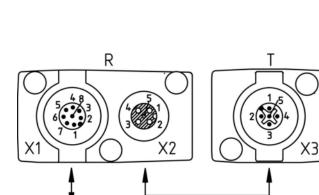
ETIM 6.0

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A Beam spacing 20 mm

- B Measurement field length 2070 mm
- F M6 thread
- G Fastening groove
- L Profile length 2088 mm
- T Transmitter
- **R** Receiver
- Y



A PWR / SW IN/OUT

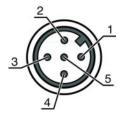
A

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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
	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
50128960	CSL710-R20-2070.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
Х	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
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
ę.	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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