



the sensor people





Figure can vary

Part no.: 50128988 CSL710-T05-1040.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	Throughbeam principle
Device type	Transmitter
Contains	2x BT-NC sliding block
Application	Precise object detection
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	1,040 mm
Number of beams	208 Piece(s)
Beam spacing	5 mm
Light source	LED , Infrared
LED 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 _B	18 30 V , DC
Residual ripple	0 15 % , From U _B
Open-circuit current	0 270 mA , The specified values refer to the entire package con-
Open-circuit current	sisting of transmitter and receiver.
Timing	
Readiness delay	400 ms
Cycle time	6.64 ms
Connection	
Number of connections	1 Piece(s)
Plug outlet	Axial
Connection 1	
Type of connection	Connector
Type of connection Function	Connector Connection to receiver Sync-input Voltage supply
	Connection to receiver Sync-input
Function	Connection to receiver Sync-input Voltage supply
Function Thread size	Connection to receiver Sync-input Voltage supply M12
Function Thread size Type	Connection to receiver Sync-input Voltage supply M12 Male



Mechanical data	
Design	Cubic
Dimension (W x H x L)	29 mm x 35.4 mm x 1,113 mm
Housing material	Metal , Aluminum
Lens cover material	Plastic / PMMA
Net weight	1,200 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	

90314990

27270910

27270910

EC002549

EC002549

Dimensioned drawings

All dimensions in millimeters

Customs tariff number

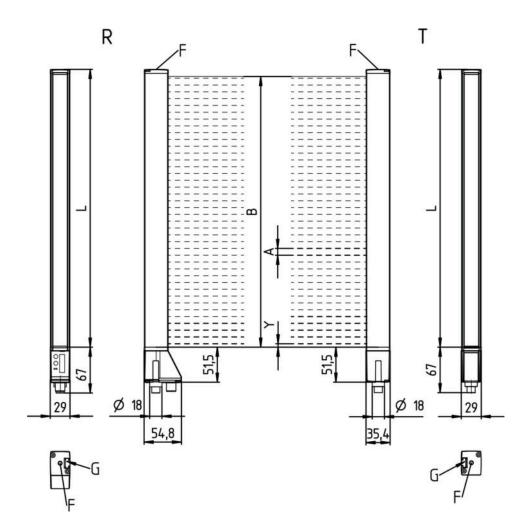
eCl@ss 8.0

eCl@ss 9.0

ETIM 5.0

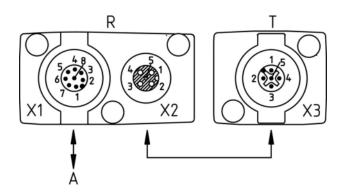
ETIM 6.0





- A Beam spacing 5 mm
- B Measurement field length 1040 mm
- F M6 thread
- G Fastening groove
- L Profile length 1048 mm
- T Transmitter
- R Receiver





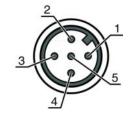
APWR / SW IN/OUT



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
50128900	CSL710-R05-1040.A/ L-M12	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

Leuze electronic GmbH + Co. KG, In der Braike 1, 73277 Owen Phone: +49 7021 573-0, Fax: +49 7021 573-199



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
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

Leuze electronic GmbH + Co. KG, In der Braike 1, 73277 Owen Phone: +49 7021 573-0, Fax: +49 7021 573-199



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