

Technical data sheet Light curtain transmitter

Part no.: 50129002

CSL710-T05-2160.A-M12



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Technical data



Basic data

Series	710
Operating principle	Throughbeam principle
Device type	Transmitter
Application	Precise object detection
Special version	
Special version	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	2,160 mm
Number of beams	432 Piece(s)
Beam spacing	5 mm
Light source	LED, Infrared
Wavelength	940 nm

Measurement data

Minimum ob	ject 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	0 435 mA, The specified values refer to the entire package consisting of trans- mitter and receiver.

Time behavior

Readiness delay	400 ms
Cycle time	13.36 ms

Connection

Number of connections	1 Piece(s)
Plug outlet	Axial

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

Mechanical data

Design	Cubic
Dimension (W x H x L)	29 mm x 35.4 mm x 2,233 mm
Housing material	Metal
Metal housing	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

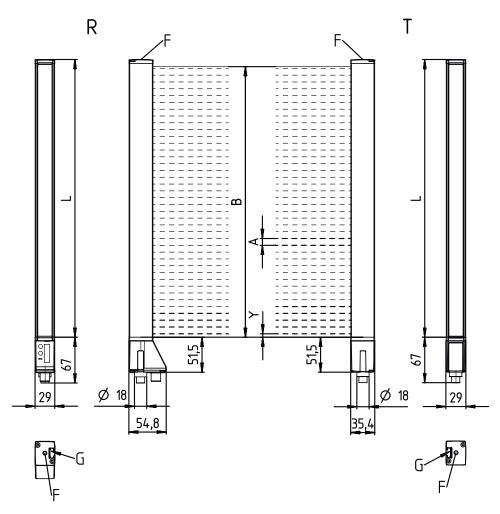
Classification

Customs tariff number	90314990
ECLASS 5.1.4	27270910
ECLASS 8.0	27270910
ECLASS 9.0	27270910
ECLASS 10.0	27270910
ECLASS 11.0	27270910
ECLASS 12.0	27270910
ECLASS 13.0	27270910
ETIM 5.0	EC002549
ETIM 6.0	EC002549
ETIM 7.0	EC002549
ETIM 8.0	EC002549

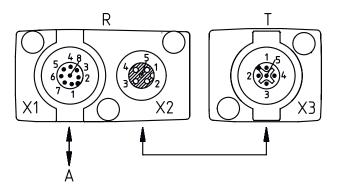
Dimensioned drawings

Leuze

All dimensions in millimeters



- Beam spacing 5 mm
- В Measurement field length 2160 mm
- M6 thread
- G Fastening groove
- Profile length 2168 mm
- Transmitter
- Receiver



PWR / SW IN / OUT

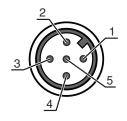
Electrical connection



Connection 1

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Pin	Pin assignment
1	FE/SHIELD
2	V+
3	GND
4	RS 485 Tx+
5	RS 485 Tx-



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
50128914	CSL710-R05-2160.A/ L-M12	Light curtain receiver	Application: Precise object detection Special version: 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
ZZZZ	Measurement field length [mm], dependent on beam spacing Value, see technical data

Part number code



A Equipment

A: Axial connector outlet

B Interface L: IO-Link

CCC Electrical connection

M12: M12 connector

Note



Notes



Observe intended use!



- ♦ This product is not a safety sensor and is not intended as personnel protection.
- Nonly 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: 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

Note



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