

Technical data sheet Light curtain transmitter

Part no.: 50128997

CSL710-T05-1760.A-M12



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Technical data



Basic data

Series	710
Operating principle	Throughbeam principle
Device type	Transmitter
Contains	2x BT-NC sliding block
Application	Precise object detection
Special design	
Opecial design	
Special design	Crossed-beam scanning

Diagonal-beam scanning Parallel-beam scanning

Polarity reversal protection

Optical data

<u> </u>	
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	1,760 mm
Number of beams	352 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

	Short circuit protected
	Transient protection
Performance data	
Supply voltage U _P	18 30 V, DC

Performance data	
Supply voltage U _B	18 30 V, DC
Residual ripple	0 15 %, From U _B
Open-circuit current	0 350 mA, The specified values refer to the entire package consisting of transmitter and receiver.

Timing

Readiness delay	400 ms
Cycle time	10.96 ms

Connection

Number of connections	1 Piece(s)
Plug outlet	Axial

Connection 1	
Function	Connection to receiver
	Sync-input
	Voltage supply

	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 1,833 mm
Housing material	Metal, Aluminum
Lens cover material	Plastic / PMMA
Net weight	1,850 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

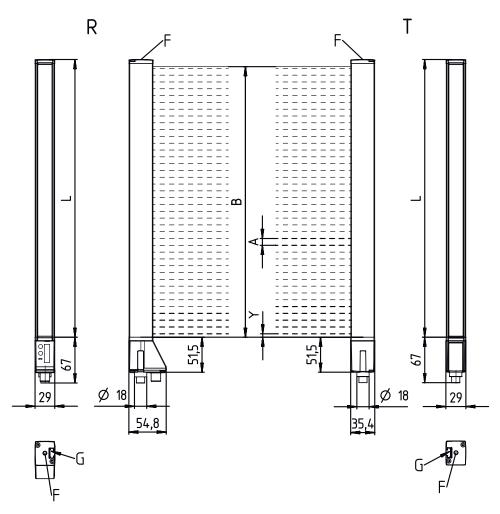
Classification

Customs tariff number	90314990
eCI@ss 8.0	27270910
eCl@ss 9.0	27270910
ETIM 5.0	EC002549
ETIM 6.0	EC002549

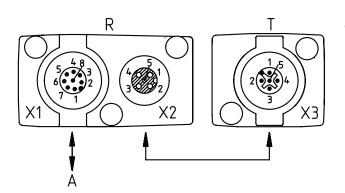
Dimensioned drawings

Leuze

All dimensions in millimeters



- Beam spacing 5 mm
- В Measurement field length 1760 mm
- M6 thread
- G Fastening groove
- Profile length 1768 mm
- Transmitter
- Receiver



PWR / SW IN/OUT

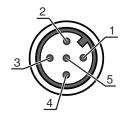
Electrical connection



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	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
50128909	CSL710-R05-1760.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
Х	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: connector outlet, axial

B 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!



- 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	Fastening, at system: Through-hole mounting Mounting bracket, at device: Clampable Type of mounting device: Turning, 360° Material: Metal, Plastic

Accessories



Note



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