



the sensor people





Figure can vary

Part no.: 50129022 CSL710-T10-1600.A-M12 Light curtain transmitter





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Technical data

| Basic data | | |
|-------------------------------|---|--|
| Series 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 | 0.3 7 m | |
| Operating range limit | Transmitter 2x BT-NC sliding block Precise object detection Guaranteed operating range 0.3 7 m Typical operating range 0.2 9 m 1,600 mm 160 Piece(s) 10 mm LED , Infrared 940 nm Polarity reversal protection Short circuit protected Transient protection 18 30 V , DC 0 15 % , From UB 0 350 mA , The specified values refer to the entire package cor sisting of transmitter and receiver. | |
| Operating range limit | | |
| Measurement field length | 1,600 mm | |
| Number of beams | 160 Piece(s) | |
| Beam spacing | 10 mm | |
| Light source | LED , Infrared | |
| LED light wavelength | | |
| | | |
| Measurement data | | |
| Minimum object diameter | 20 mm | |
| | | |
| Electrical data | | |
| Protective circuit | Polarity reversal protection | |
| | Short circuit protected | |
| 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 | 5.2 ms | |
| | | |
| Connection | | |
| Number of connections | ** | |
| Plug outlet | Axial | |
| Connection 1 | | |
| Type of connection | Commoden | |
| | Connector | |
| 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 | |



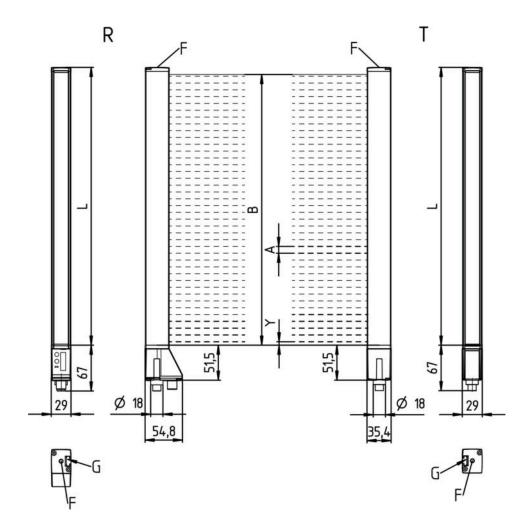
| Mechanical data | |
|--------------------------------|---|
| Design | Cubic |
| Dimension (W x H x L) | 29 mm x 35.4 mm x 1,673 mm |
| Housing material | Metal , Aluminum |
| Lens cover material | Plastic / PMMA |
| Net weight | 1,700 g |
| Housing color | Red |
| Type of fastening | Groove mounting 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

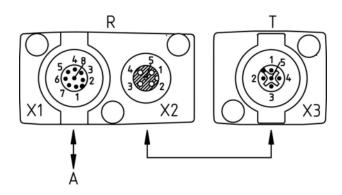
All dimensions in millimeters





- A Beam spacing 10 mm
- B Measurement field length 1600 mm
- F M6 thread
- G Fastening groove
- L Profile length 1608 mm
- T Transmitter
- R Receiver





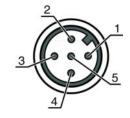
APWR / SW IN/OUT



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 |
| | 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 |
|----------|-----------------------------|------------------------|--|
| 50128938 | CSL710-R10-1600.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 |
|--------|---|
| 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.