



Figure can vary

Part no.: 50129042
CSL710-T20-1910.A-M12
Light curtain transmitter



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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 |
| 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 | 1,910 mm |
| Number of beams | 96 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 ... 350 mA , The specified values refer to the entire package consisting of transmitter and receiver. |
| Timing | |
| Readiness delay | 400 ms |
| Cycle time | 3.28 ms |
| Connection | |
| Number of connections | 1 Piece(s) |
| Plug outlet | Axial |
| Connection 1 | |
| Type of connection | Connector |
| Function | Connection to receiver Sync-input Voltage supply |
| Thread size | M12 |
| Type | 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 1,993 mm |
| Housing material | Metal , Aluminum |
| Lens cover material | Plastic / PMMA |
| Net weight | 2,000 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

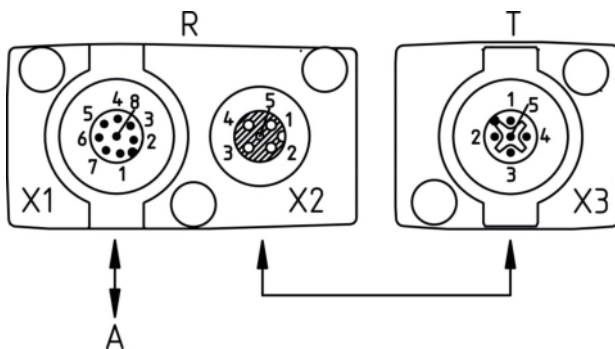
| | |
|-----------------------|----------|
| Customs tariff number | 90314990 |
| eCl@ss 8.0 | 27270910 |
| eCl@ss 9.0 | 27270910 |
| ETIM 5.0 | EC002549 |
| ETIM 6.0 | EC002549 |

Dimensioned drawings

All dimensions in millimeters



- A Beam spacing 20 mm
- B Measurement field length 1910 mm
- F M6 thread
- G Fastening groove
- L Profile length 1928 mm
- T Transmitter
- R Receiver
- Y



APWR / SW IN/OUT

Electrical connection

| Connection 1 | |
|--------------------|--|
| Type of connection | Connector |
| Function | Connection to receiver Sync-input Voltage supply |
| Thread size | M12 |
| Type | 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 |
|---|----------|-------------------------|------------------------|--|
|  | 50128959 | CSL710-R20-1910.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-XYX-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 |
| 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 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 |
|---|----------|-------------|----------------------|---|
|  | 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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Note

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