



**Part no.: 50131386**  
**CSL505-T25-275-M8**  
**Light curtain transmitter**



Figure can vary



## Contents

- Technical data
- Dimensioned drawings
- Electrical connection
- Operation and display
- Suitable receivers
- Part number code
- Accessories

## Technical data

| <b>Basic data</b>            |   |
|------------------------------|---|
| Series                       | 505   |
| Operating principle          | Throughbeam principle   |
| Device type                  | Transmitter   |
| Application                  | Precise object detection  |
| <b>Optical data</b>          |   |
| Operating range              | Guaranteed operating range  |
| Operating range              | 0.3 ... 5 m   |
| Measurement field length     | 275 mm  |
| Number of beams              | 12 Piece(s)   |
| Beam spacing                 | 25 mm   |
| Light source                 | LED , Infrared  |
| LED light wavelength         | 860 nm  |
| <b>Measurement data</b>      |   |
| Minimum object diameter      | 27.5 mm   |
| <b>Electrical data</b>       |   |
| Protective circuit           | Inductive protection<br>Polarity reversal protection<br>Short circuit protected |
| <b>Performance data</b>      |   |
| Supply voltage $U_B$         | 18 ... 30 V , DC  |
| <b>Connection</b>            |   |
| Number of connections        | 1 Piece(s)  |
| <b>Connection 1</b>          |   |
| Type of connection           | Connector   |
| Function                     | Deactivation input<br>Voltage supply  |
| Thread size                  | M8  |
| Type                         | Male  |
| Material                     | Metal   |
| No. of pins                  | 4 -pin  |
| Encoding                     | A-coded   |
| <b>Mechanical data</b>       |   |
| Design                       | Cubic   |
| Dimension (W x H x L)        | 10 mm x 350 mm x 27 mm  |
| Housing material             | Metal , Aluminum  |
| Lens cover material          | Plastic   |
| Housing color                | Silver  |
| Type of fastening            | Through-hole mounting   |
| <b>Operation and display</b> |   |
| Type of display              | LED   |
| Number of LEDs               | 1 Piece(s)  |

Part no.: 50131386 – CSL505-T25-275-M8 – Light curtain transmitter

|                       |                                |
|-----------------------|--------------------------------|
| Type of configuration | Software<br>Via pin assignment |
|-----------------------|--------------------------------|

#### **Environmental data**

|                                |               |
|--------------------------------|---------------|
| Ambient temperature, operation | -30 ... 50 °C |
| Ambient temperature, storage   | -40 ... 65 °C |

#### **Certifications**

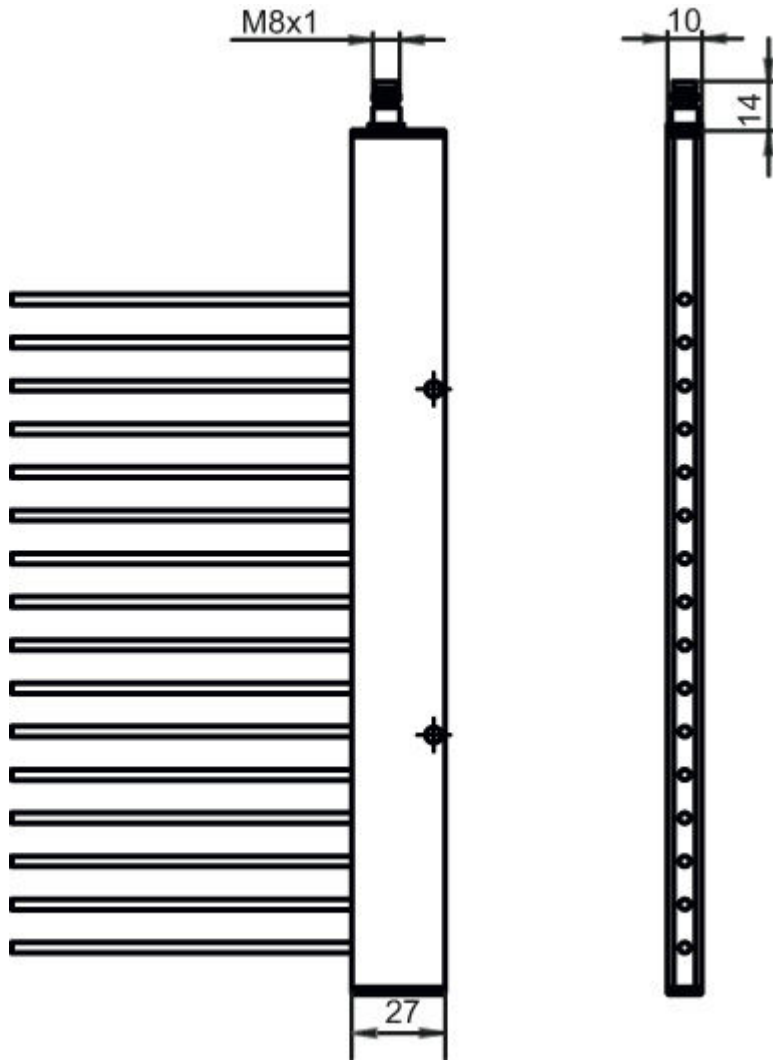
|                      |       |
|----------------------|-------|
| Degree of protection | IP 65 |
| Protection class     | III   |

#### **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**

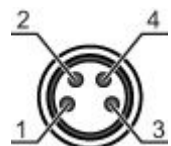
All dimensions in millimeters



## Electrical connection

| Connection 1       |                                      |
|--------------------|--------------------------------------|
| Type of connection | Connector                            |
| Function           | Deactivation input<br>Voltage supply |
| Thread size        | M8                                   |
| Type               | Male                                 |
| Material           | Metal                                |
| No. of pins        | 4 -pin                               |
| Encoding           | A-coded                              |

| Pin | Pin assignment |
|-----|----------------|
| 1   | V+             |
| 2   | n.c.           |
| 3   | GND            |
| 4   | IN 1           |




Part no.: 50131386 – CSL505-T25-275-M8 – Light curtain transmitter

## Operation and display

### LEDs

| LED | Display               | Meaning               |
|-----|-----------------------|-----------------------|
| 1   | Off                   | Off                   |
|     | Red, continuous light | Operational readiness |
|     | Red, flashing         | Error                 |

## Suitable receivers

|   | Part no. | Designation       | Article                | Description   |
|---|----------|-------------------|------------------------|---|
|  | 50131330 | CSL505-R25-275-M8 | Light curtain receiver | Application: Precise object detection<br>Operating range: 0.3 ... 5 m<br>Digital switching outputs: 2 Piece(s)<br>Switching output: Transistor, Push-pull, Light/dark reversible<br>Connection: Connector, M8, 4 -pin |

## Part number code

Part designation: **CSL505-XXXX-ZZZZ-AA**


|      |  |
|------|--|
| X    | <b>Operating principle:</b><br>T: transmitter<br>R: receiver                                 |
| YYY  | <b>Beam spacing:</b><br>05: 5 mm<br>12.5: 12.5 mm<br>25: 25 mm<br>50: 50 mm<br>100: 100 mm   |
| ZZZZ | <b>Measurement field length:</b><br>Measurement field length [mm], dependent on beam spacing |
| AA   | <b>Electrical connection:</b><br>M8: M8 connector, 4-pin (plug)                              |

### Note


A list with all available device types can be found on the Leuze electronic website at [www.leuze.com](http://www.leuze.com).

## Accessories

### Connection technology - Connection cables

|   | Part no. | Designation       | Article          | Description   |
|---|----------|-------------------|------------------|---|
|  | 50130850 | KD U-M8-4A-V1-050 | Connection cable | Connection 1: Connector, M8, Axial, Female, 4 -pin<br>Connection 2: Open end<br>Shielded: No<br>Cable length: 5,000 mm<br>Sheathing material: PVC |

Part no.: 50131386 – CSL505-T25-275-M8 – Light curtain transmitter

|   | Part no. | Designation       | Article          | Description  |
|---|----------|-------------------|------------------|--|
|  | 50130871 | KD U-M8-4W-V1-050 | Connection cable | Connection 1: Connector, M8, Angled, Female, 4 -pin<br>Connection 2: Open end<br>Shielded: No<br>Cable length: 5,000 mm<br>Sheathing material: PVC |

|  | Part no. | Designation      | Article | Description   |
|--|----------|------------------|---------|---|
|  | 50132069 | CSL505-Interface | Module  | Connection: Sub-D<br>Functions: Configuration and test device |