# Technical data sheet
# Light curtain transmitter
Part no.: 50131392
CSL505-T25-875-M8



Figure can vary

**Contents**


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

# Technical data

## Basic data

| | |
|---|---|
| **Series** | 505 |
| **Operating principle** | Throughbeam principle |
| **Device type** | Transmitter |
| **Application** | Precise object detection |

## Special design

| | |
|---|---|
| **Special design** | Crossed-beam scanning |
| | Diagonal-beam scanning |
| | Parallel-beam scanning |

## Optical data

| | |
|---|---|
| **Operating range** | Guaranteed operating range |
| **Operating range** | 0.3 ... 5 m |
| **Measurement field length** | 875 mm |
| **Number of beams** | 36 Piece(s) |
| **Beam spacing** | 25 mm |
| **Light source** | LED, Infrared |
| **LED light wavelength** | 860 nm |

## Measurement data

| | |
|---|---|
| **Minimum object diameter** | 27.5 mm |

## Electrical data

| | |
|---|---|
| **Protective circuit** | Inductive protection |
| | Polarity reversal protection |
| | Short circuit protected |

### Performance data

| | |
|---|---|
| **Supply voltage $U_B$** | 18 ... 30 V, DC |

## Connection

| | |
|---|---|
| **Number of connections** | 1 Piece(s) |

### Connection 1

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

## Mechanical data

| | |
|---|---|
| **Design** | Cubic |
| **Dimension (W x H x L)** | 10 mm x 950 mm x 27 mm |
| **Housing material** | Metal, Aluminum |
| **Lens cover material** | Plastic |
| **Housing color** | Silver |
| **Type of fastening** | Through-hole mounting |

## Operation and display

| | |
|---|---|
| **Type of display** | LED |
| **Number of LEDs** | 1 Piece(s) |
| **Type of configuration** | Software |
| | Via pin assignment |

## Environmental data

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

## Certifications

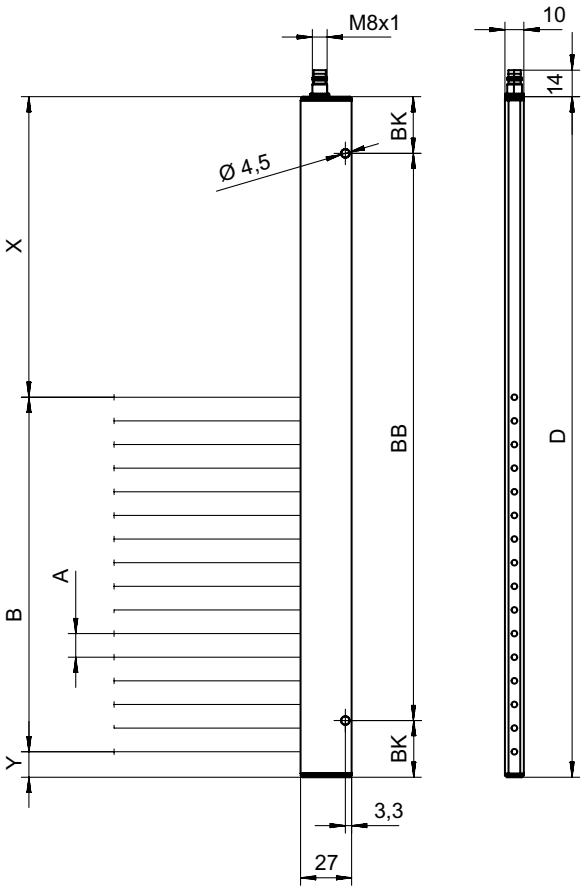
| | |
|---|---|
| **Degree of protection** | IP 65 |
| **Protection class** | III |

## 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



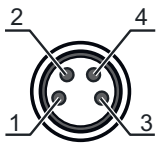

Observe the exact dimensions in the chapter "Technical data, dimensioned drawings" in the operating instructions.

# Electrical connection

## Connection 1

| | |
|---|---|
| **Function** | Deactivation input |
| | Voltage supply |
| **Type of connection** | Connector |
| **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 |




# Operation and display

| LED | Display | Meaning |
|---|---|---|
| **1** | Off | Off |

# Operation and display

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

# Suitable receivers

| | Part no. | Designation | Article | Description |
|---|---|---|---|---|
|  | 50131336 | CSL505-R25-875-M8 | Light curtain receiver | Application: Precise object detection<br>Special design: Parallel-beam scanning, Crossed-beam scanning, Diagonal-beam scanning, Teach input, Warning output<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-XYYY-ZZZZ-AA**

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

**Note**

A list with all available device types can be found on the Leuze website at 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 |
|  | 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 |

# Accessories

## Configuration devices

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

**Note**

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