

Technical data sheet Light curtain transmitter

Part no.: 50131376

CSL505-T12.5-188-M8

Contents

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



For illustration purposes only



Technical data

Basic data

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

Special version

| | |
|-----------------|------------------------|
| Special version | Crossed-beam scanning |
| | Diagonal-beam scanning |
| | Parallel-beam scanning |

Optical data

| | |
|--------------------------|---------------|
| Operating range | 0.3 ... 5 m |
| Measurement field length | 188 mm |
| Number of beams | 16 Piece(s) |
| Beam spacing | 12.5 mm |
| Light source | LED, Infrared |
| Wavelength | 860 nm |
| Transmitted-signal shape | Pulsed |

Measurement data

| | |
|-------------------------|-------|
| Minimum object diameter | 15 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 27 mm x 250 mm |
| Housing material | Metal |
| Metal housing | Aluminum |
| Lens cover material | Plastic |
| Net weight | 170 g |
| 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 |
| ECLASS 5.1.4 | 27270910 |
| ECLASS 8.0 | 27270910 |
| ECLASS 9.0 | 27270910 |
| ECLASS 10.0 | 27270910 |
| ECLASS 11.0 | 27270910 |
| ECLASS 12.0 | 27270910 |
| ECLASS 13.0 | 27270910 |
| ECLASS 14.0 | 27270910 |
| ECLASS 15.0 | 27270910 |
| ECLASS 16.0 | 27270910 |
| ETIM 5.0 | EC002549 |
| ETIM 6.0 | EC002549 |
| ETIM 7.0 | EC002549 |
| ETIM 8.0 | EC002549 |
| ETIM 9.0 | EC002549 |
| ETIM 10.0 | EC002549 |
| UNSPSC 26.08 | 39121528 |

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 Red, flashing | Operational readiness Error |

Suitable receivers

| Part no. | Designation | Operating range Operating range limit | Description |
|----------|---------------------|---|--|
| 50131319 | CSL505-R12.5-188-M8 | 0.3 ... 5 m | Application: Precise object detection Special version: Parallel-beam scanning, Crossed-beam scanning, Diagonal-beam scanning, Teach input, Warning output Digital switching outputs: 2 Piece(s) Switching output: Transistor, Push-pull, Light/dark switchable Connection: Connector, M8, 4 -pin |

Part number code

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

| | |
|-------------|---|
| X | Operating principle T: transmitter R: receiver |
| YYY | Beam spacing 05: 5 mm 12.5: 12.5 mm 25: 25 mm 50: 50 mm 100: 100 mm |
| ZZZZ | Measurement field length Measurement field length [mm], dependent on beam spacing |
| AA | Electrical connection 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 | Application: Chemical resistant Connection 1: Connector, M8, Axial, Female, 4 -pin Connector, LED: No Connection 2: Open end Shielded: No Cable length: 5,000 mm Sheathing material: PVC |



Accessories

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

Configuration devices

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

Note



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