

## Technical data sheet

### Light curtain receiver

Part no.: 50131633  
CSL505-R50-750-VB-M8

#### Contents

- Technical data
- Dimensioned drawings
- Electrical connection
- Operation and display
- Suitable transmitters
- Accessories



Figure can vary



## Technical data

### Basic data

Series	505
Operating principle	Throughbeam principle
Device type	Receiver
Application	Precise object detection

### Special version

Special version	Crossed-beam scanning
	Diagonal-beam scanning
	Parallel-beam scanning
	Teach input
	Warning output

### Optical data

Operating range	Guaranteed operating range
Operating range	0.3 ... 5 m
Measurement field length	750 mm
Number of beams	16 Piece(s)
Beam spacing	50 mm

### Measurement data

Minimum object diameter	52.5 mm
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### Electrical data

Protective circuit	Inductive protection
	Polarity reversal protection
	Short circuit protected

### Performance data

Supply voltage $U_B$	18 ... 30 V, DC
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### Outputs

Number of digital switching outputs	2 Piece(s)
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### Switching outputs

#### Switching output 1

Switching element	Transistor, Push-pull
Switching principle	Light/dark reversible

#### Switching output 2

Switching element	Transistor, Push-pull
Switching principle	Light/dark reversible

### Timing

Cycle time	20 ms
Response time per beam	1,000 $\mu$ s

### Connection

Number of connections	1 Piece(s)
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### Connection 1

Function	Signal OUT
	Teach 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 960 mm x 27 mm
Housing material	Metal
Metal housing	Aluminum
Lens cover material	Plastic
Housing color	Silver
Type of fastening	Through-hole mounting

### Operation and display

Type of display	LED
Number of LEDs	2 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
Standards applied	EN 60947-5-2 (German version)

### Classification

Customs tariff number	90314990
eCl@ss 5.1.4	27270910
eCl@ss 8.0	27270910
eCl@ss 9.0	27270910
eCl@ss 10.0	27270910
eCl@ss 11.0	27270910
ETIM 5.0	EC002549
ETIM 6.0	EC002549
ETIM 7.0	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	Signal OUT Teach 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	OUT 1 / Teach-in / Warning output
3	GND
4	OUT 2

## Operation and display

Display LED 1	Display LED 2	Meaning
Off	Off	Off
Red, continuous light	Red, continuous light	Operational readiness
Red, continuous light	Off	Object detected
Red, flashing	Red, continuous light	Ready with minor error
Red, flashing	Off	Object detected with minor error
Red, double flash	Off	Configuration error
Red, flashing in phase	Red, flashing in phase	Serious error A
Red, flashing out of phase	Red, flashing out of phase	Serious error B
Red, continuous light	Red, double flash	Teach event successful

## Suitable transmitters

Part no.	Designation	Article	Description
50131667	CSL505-T50-750-VB-M8	Light curtain transmitter	Application: Precise object detection Special version: Diagonal-beam scanning, Crossed-beam scanning, Parallel-beam scanning Operating range: 0.3 ... 5 m Connection: Connector, M8, 4 -pin

## Accessories

### Connection technology - Connection cables

Part no.	Designation	Article	Description
50130856	KD U-M8-4A-P1-050	Connection cable	Connection 1: Connector, M8, Axial, Female, 4 -pin Connection 2: Open end Shielded: No Cable length: 5,000 mm Sheathing material: PUR
50130850	KD U-M8-4A-V1-050	Connection cable	Connection 1: Connector, M8, Axial, Female, 4 -pin Connection 2: Open end Shielded: No Cable length: 5,000 mm Sheathing material: PVC
50130869	KD U-M8-4W-V1-020	Connection cable	Connection 1: Connector, M8, Angled, Female, 4 -pin Connection 2: Open end Shielded: No Cable length: 2,000 mm Sheathing material: PVC

## Configuration devices

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

## Accessories

### Note



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