

Technical data sheet

Light curtain transmitter

Part no.: 50131420
CSL505-T100-3100-M8

Contents

- Technical data
- Dimensioned drawings
- Electrical connection
- Operation and display
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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
Operating range	Guaranteed operating range
Measurement field length	3,100 mm
Number of beams	32 Piece(s)
Beam spacing	100 mm
Light source	LED, Infrared
Wavelength	860 nm
Transmitted-signal shape	Pulsed

Measurement data

Minimum object diameter	102.5 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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Connection

Number of connections	1 Piece(s)
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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 3,180 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	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
ETIM 5.0	EC002549
ETIM 6.0	EC002549
ETIM 7.0	EC002549
ETIM 8.0	EC002549
ETIM 9.0	EC002549
ETIM 10.0	EC002549

Dimensioned drawings

All dimensions in millimeters



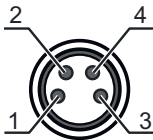
"Observe the exact dimensions in the chapter
"Technical data, dimensioned drawings" in the
operating instructions.

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 Red, flashing	Operational readiness Error

Suitable receivers

Part no.	Designation	Article	Description
50131364	CSL505-R100-3100-M8	Light curtain receiver	Application: Precise object detection Special version: Parallel-beam scanning, Crossed-beam scanning, Diagonal-beam scanning, Teach input, Warning output Operating range: 0.3 ... 5 m Digital switching outputs: 2 Piece(s) Switching output: Transistor, Push-pull, Light/dark reversible 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	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
50130871	KD U-M8-4W-V1-050	Connection cable	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

Accessories

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.