Technical data sheet
Light curtain receiver
Part no.: 50131318
CSL505-R12.5-88-M8



Figure can vary

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Technical data

Leuze

Basic data

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

Special design

Special design	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	88 mm
Number of beams	8 Piece(s)
Beam spacing	12.5 mm

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

Outputs

Number of digital switching outputs	2 Piece(s)

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	12 ms
Response time per beam	1,000 µs

Connection

Number of connections	1 Piece(s)

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 150 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	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

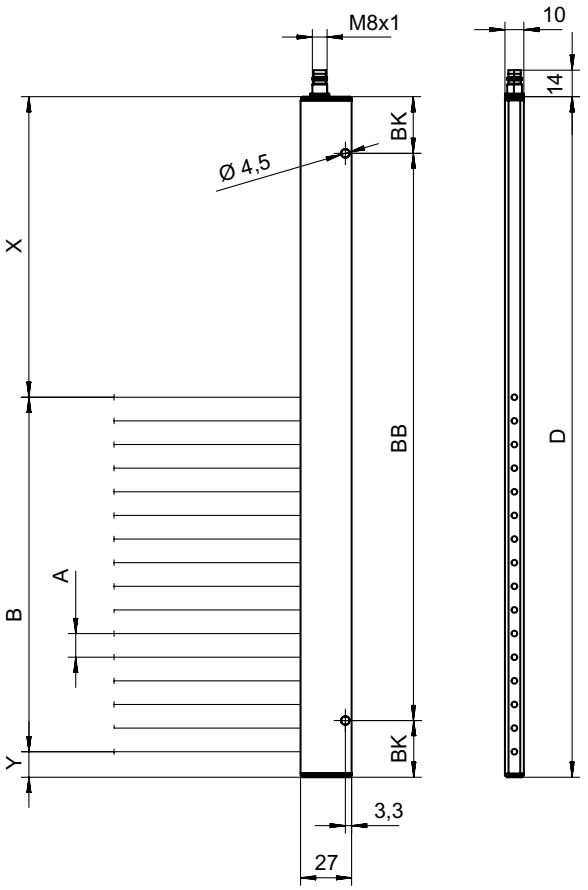
Degree of protection	IP 65
Protection class	III
Standards applied	EN 60947-5-2 (German version)

Classification

Customs tariff number	90314990
eCl@ss 8.0	27270910
eCl@ss 9.0	27270910
ETIM 5.0	EC002549
ETIM 6.0	EC002549

Dimensioned drawings

All dimensions in millimeters



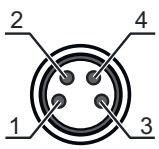
Observe the exact dimensions in the chapter "Technical data, dimensioned drawings" in the operating instructions.

Electrical connection

Connection 1

Function	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
	50131375	CSL505-T12.5-88-M8	Light curtain transmitter	Application: Precise object detection Special design: Diagonal-beam scanning, Crossed-beam scanning, Parallel-beam scanning Operating range: 0.3 ... 5 m Connection: Connector, M8, 4 -pin

Part number code

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

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 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	Connection 1: Connector, M8, Angled, Female, 4 -pin 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	Connection: Sub-D 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.