SMART SENSOR BUSINESS

Leuze electronic
the sensor people

Part no.: 50131336
CSL505-R25-875-M8
Light curtain receiver

CE   CSA ® c us

Figure can vary

Contents

Technical data

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	875 mm
Number of beams	36 Piece(s)
Beam spacing	25 mm

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
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	40 ms
Response time per beam	1,000 µs

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 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	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

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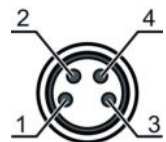We reserve the right to make technical changes • eng 2020-02-18
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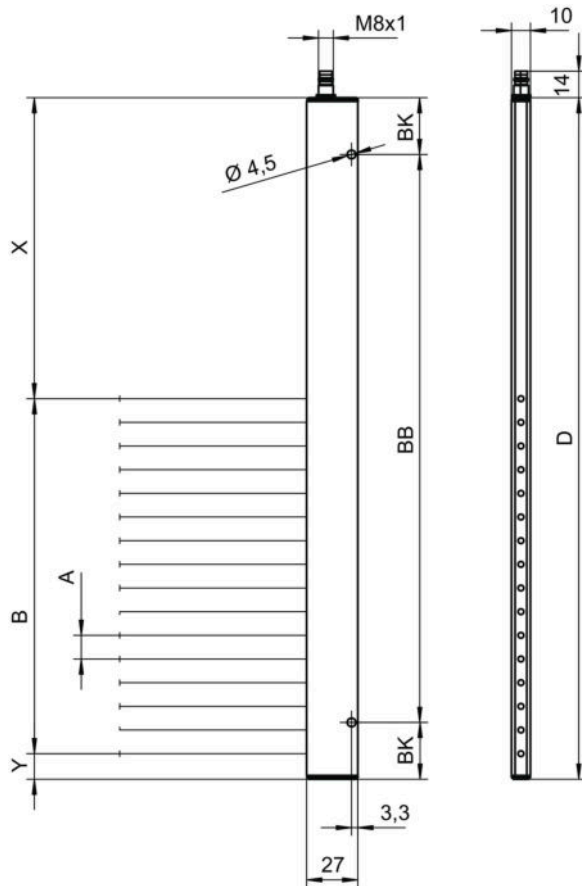
Observe the exact dimensions in the chapter "Technical data, dimensioned drawings" in the operating instructions.

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

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Operation and display

LEDs

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
	50131392	CSL505-T25-875-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.

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Part no.: 50131336 – CSL505-R25-875-M8 – Light curtain receiver

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
	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

	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 electronic website in the Download tab of the article detailed page.

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