



**Part no.: 50131319**  
**CSL505-R12.5-188-M8**  
**Light curtain receiver**



Figure can vary



## Contents

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## Technical data

<b>Basic data</b>	
Series	505
Operating principle	Throughbeam principle
Device type	Receiver
Application	Precise object detection

<b>Optical data</b>	
Operating range	Guaranteed operating range
Operating range	0.3 ... 5 m
Measurement field length	188 mm
Number of beams	16 Piece(s)
Beam spacing	12.5 mm

<b>Measurement data</b>	
Minimum object diameter	15 mm

<b>Electrical data</b>	
Protective circuit	Inductive protection Polarity reversal protection Short circuit protected

<b>Performance data</b>	
Supply voltage $U_B$	18 ... 30 V , DC

<b>Outputs</b>	
Number of digital switching outputs	2 Piece(s)

<b>Switching outputs</b>	
<b>Switching output 1</b>	
Switching element	Transistor , Push-pull
Switching principle	Light/dark reversible
<b>Switching output 2</b>	
Switching element	Transistor , Push-pull
Switching principle	Light/dark reversible

<b>Timing</b>	
Cycle time	20 ms
Response time per beam	1,000 $\mu$ s

<b>Connection</b>	
Number of connections	1 Piece(s)

<b>Connection 1</b>	
Type of connection	Connector
Function	Signal OUT Teach input Voltage supply
Thread size	M8
Type	Male
Material	Metal
No. of pins	4 -pin
Encoding	A-coded

**Part no.: 50131319 – CSL505-R12.5-188-M8 – Light curtain receiver****Mechanical data**

Design	Cubic
Dimension (W x H x L)	10 mm x 250 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**

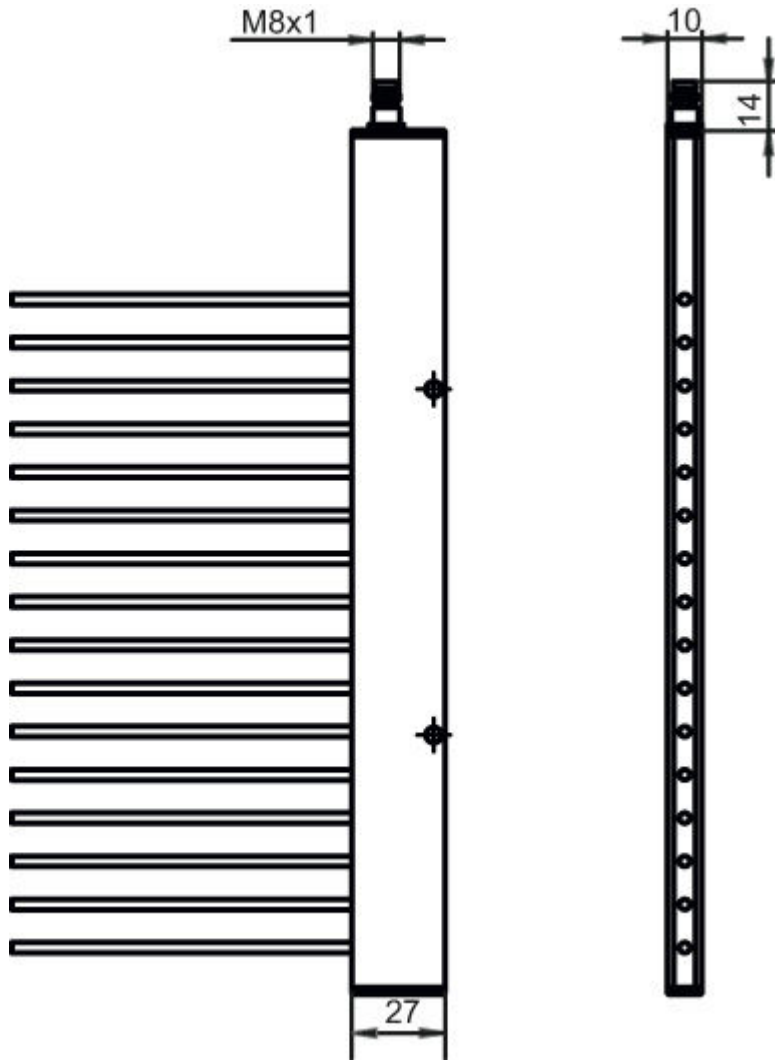
Degree of protection	IP 65
Protection class	III
Standards applied	EN 60947-5-2 (German version)

**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



### Electrical connection

Connection 1	
Type of connection	Connector
Function	Signal OUT Teach input Voltage supply
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

### 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
	50131376	CSL505-T12.5-188-M8	Light curtain transmitter	Application: Precise object detection Operating range: 0.3 ... 5 m Connection: Connector, M8, 4 -pin

## Part number code

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

X	<b>Operating principle:</b> T: transmitter R: receiver
YYY	<b>Beam spacing:</b> 05: 5 mm 12.5: 12.5 mm 25: 25 mm 50: 50 mm 100: 100 mm
ZZZZ	<b>Measurement field length:</b> Measurement field length [mm], dependent on beam spacing
AA	<b>Electrical connection:</b> M8: M8 connector, 4-pin (plug)

### Note

A list with all available device types can be found on the Leuze electronic website at [www.leuze.com](http://www.leuze.com).

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## 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