## SMART SENSOR BUSINESS

## Leuze electronic

the sensor people



Part no.: 50131360 CSL505-R100-1500-M8 Light curtain receiver



Figure can vary

# Contents

- Technical data
- · Dimensioned drawings
- · Electrical connection
- · Operation and display
- Suitable transmitters
- Part number code
- Accessories

### Part no.: 50131360 – CSL505-R100-1500-M8 – Light curtain receiver

#### **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	1,500 mm		
Number of beams	16 Piece(s)		
Beam spacing	100 mm		
Measurement data			
Minimum object diameter	102.5 mm		
Electrical data			
Protective circuit	Inductive protection Polarity reversal protection Short circuit protected		
Performance data			
Supply voltage UB	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	20 ms		
Response time per beam	1,000 µs		
Connection			
Number of connections	1 Piece(s)		

## ▲ Leuze electronic

## Part no.: 50131360 – CSL505-R100-1500-M8 – Light curtain receiver

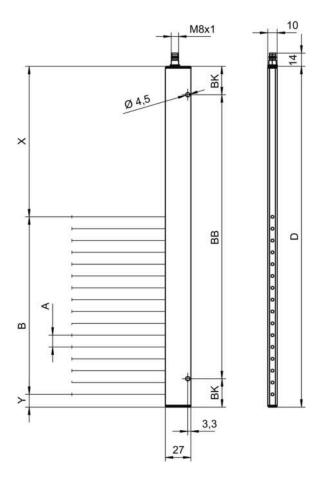
Connection 1	
Connection 1	Of mark OUT
Function	Signal OUT Teach input Voltage supply
Type of connection	Connector
Thread size	M8
Туре	Male
Material	Metal
No. of pins	4 -pin
Encoding	A-coded
lechanical data	
Design	Cubic
Dimension (W x H x L)	10 mm x 1,580 mm x 27 mm
lousing material	Metal , Aluminum
ens cover material	Plastic
lousing color	Silver
ype of fastening	Through-hole mounting
Dperation and display	
ype of display	LED
lumber of LEDs	2 Piece(s)
ype of configuration	Software Via pin assignment
Environmental data	
Multimodel and a manual state operation	-30 50 °C
mbient 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
Cl@ss 8.0	27270910
Cl@ss 9.0	27270910
TIM 5.0	EC002549
TIM 6.0	EC002549

#### **Dimensioned drawings**

All dimensions in millimeters

## ▲ Leuze electronic

### Part no.: 50131360 – CSL505-R100-1500-M8 – Light curtain receiver



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	
Туре	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		



## Part no.: 50131360 – CSL505-R100-1500-M8 – Light curtain receiver

#### **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 0		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
50131416	CSL505-T100-1500-M8	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

Х	Operating principle: T: transmitter R: receiver		
ΥΥΥ	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.

### Part no.: 50131360 – CSL505-R100-1500-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		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.