

## Technical data sheet

### Throughbeam photoelectric sensor

Part no.: 50140109

LSS 25B.X-S8



Figure can vary

#### Contents

- Technical data
- Dimensioned drawings
- Electrical connection
- Operation and display
- Suitable receivers
- Notes
- Further information
- Accessories



## Technical data

### Basic data

Series	25B
Operating principle	Throughbeam principle
Device type	Transmitter
Application	Detection of products in bag packaging Extremely powerful transmitter for penetrating materials

### Optical data

Operating range	Serves to visualize the high transmitting power. It is extremely difficult to align the sensor at this distance
Operating range	0 ... 800 m
Light source	LED, Infrared
LED light wavelength	850 nm
LED group	Exempt group (in acc. with EN 62471)
Transmitted-signal shape	Pulsed

### Electrical data

Protective circuit	Polarity reversal protection Short circuit protected
Performance data	
Supply voltage $U_B$	10 ... 30 V, DC
Residual ripple	0 ... 15 %, From $U_B$
Open-circuit current	0 ... 20 mA

### Timing

Switching frequency	100 Hz
Response time	5 ms
Readiness delay	300 ms

### Connection

#### Connection 1

Function	Voltage supply
Type of connection	Connector
Thread size	M8
Type	Male
Material	Plastic
No. of pins	4 -pin

### Mechanical data

Dimension (W x H x L)	15 mm x 38.9 mm x 28.7 mm
Housing material	Plastic, PC-ABS
Lens cover material	Plastic / PMMA
Net weight	55 g
Housing color	Red
Type of fastening	Through-hole mounting Via optional mounting device

### Operation and display

Type of display	LED
Number of LEDs	2 Piece(s)

### Environmental data

Ambient temperature, operation	-40 ... 50 °C
Ambient temperature, storage	-40 ... 60 °C

### Certifications

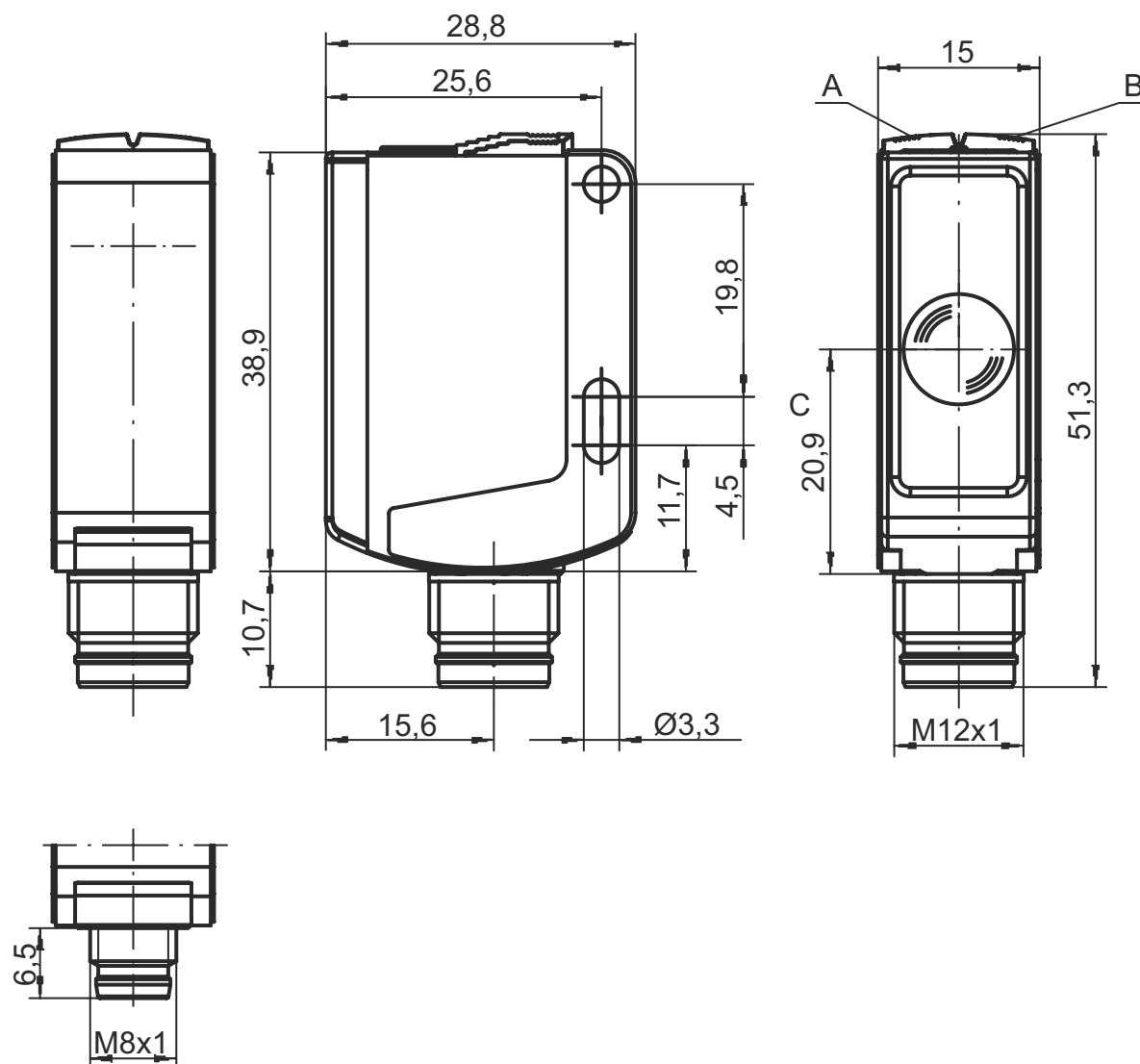
Degree of protection	IP 66 IP 67
Protection class	II
Certifications	c UL US
Standards applied	IEC 60947-5-2

### Classification

Customs tariff number	85365019
eCl@ss 8.0	27270901
eCl@ss 9.0	27270901
ETIM 5.0	EC002716
ETIM 6.0	EC002716

## Dimensioned drawings

All dimensions in millimeters



- A Green LED
- B Yellow LED
- C Optical axis

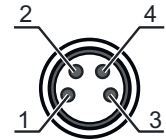
## Electrical connection

### Connection 1

Function	Voltage supply
Type of connection	Connector
Thread size	M8
Type	Male
Material	Plastic
No. of pins	4 -pin

## Electrical connection



Pin	Pin assignment
1	V+
2	n.c.
3	GND
4	n.c.





## Operation and display


LED	Display	Meaning
1	Green, continuous light	Operational readiness
2	Yellow, continuous light	Light path free

## Suitable receivers

	Part no.	Designation	Article	Description
	50134496	LSE 25B/22.2-S8	Throughbeam photoelectric sensor receiver	Application: Detection of products in bag packaging Operating range limit: 0 ... 240 m Supply voltage: DC Digital switching outputs: 2 Piece(s) Switching output 1: Transistor, NPN, Light switching Switching output 2: Transistor, NPN, Dark switching Switching frequency: 100 Hz Connection: Connector, M8, Plastic, 4 -pin Operational controls: 270° potentiometer
	50134495	LSE 25B/44.2-S8	Throughbeam photoelectric sensor receiver	Application: Detection of products in bag packaging Operating range limit: 0 ... 240 m Supply voltage: DC Digital switching outputs: 2 Piece(s) Switching output 1: Transistor, PNP, Light switching Switching output 2: Transistor, PNP, Dark switching Switching frequency: 100 Hz Connection: Connector, M8, Plastic, 4 -pin Operational controls: 270° potentiometer

## Notes

 Observe intended use!	
	<ul style="list-style-type: none"> <li>⚠ This product is not a safety sensor and is not intended as personnel protection.</li> <li>⚠ The product may only be put into operation by competent persons.</li> <li>⚠ Only use the product in accordance with its intended use.</li> </ul>


For UL applications:	
	<ul style="list-style-type: none"> <li>⚠ For UL applications, use is only permitted in Class 2 circuits in accordance with the NEC (National Electric Code).</li> <li>⚠ These proximity switches shall be used with UL Listed Cable assemblies rated 30V, 0.5A min, in the field installation, or equivalent (categories: CYJV/ CYJV7 or PVVA/PVVA7)</li> </ul>

## Further information


- Light source: Average life expectancy 100,000h at an ambient temperature of 25 °C

## 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

### Mounting technology - Mounting brackets

	Part no.	Designation	Article	Description
	50040269	BT 25	Mounting device	Design of mounting device: Angle, L-shape Fastening, at system: Through-hole mounting Mounting bracket, at device: Screw type Type of mounting device: Rigid Material: Metal

### Mounting technology - Rod mounts

	Part no.	Designation	Article	Description
	50117829	BTP 200M-D12	Mounting system	Design of mounting device: Protection hood Fastening, at system: For 12 mm rod Mounting bracket, at device: Screw type Type of mounting device: Clampable, Adjustable, Turning, 360° Material: Metal
	50117255	BTU 200M-D12	Mounting system	Design of mounting device: Mounting system Fastening, at system: For 12 mm rod, Sheet-metal mounting Mounting bracket, at device: Screw type, Suited for M3 screws Type of mounting device: Clampable, Adjustable, Turning, 360° Material: Metal

#### Note



↗ A list with all available accessories can be found on the Leuze website in the Download tab of the article detailed page.