



Figure can vary

**Part no.: 50140109**  
**LSS 25B.X-S8**  
**Throughbeam photoelectric sensor transmitter**



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## Technical data

| <b>Basic data</b>            |   |
|------------------------------|---|
| Series                       | 25B   |
| Operating principle          | Throughbeam principle                                   |
| Device type                  | Transmitter   |
| Application                  | Detection of products in bag packaging                  |
| <b>Optical data</b>          |   |
| Operating range              | Guaranteed operating range                              |
| 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  |
| <b>Electrical data</b>       |   |
| Protective circuit           | Polarity reversal protection<br>Short circuit protected |
| <b>Performance data</b>      |   |
| Supply voltage $U_B$         | 10 ... 30 V , DC  |
| Residual ripple              | 0 ... 15 % , From $U_B$                                 |
| Open-circuit current         | 0 ... 20 mA   |
| <b>Timing</b>                |   |
| Switching frequency          | 100 Hz  |
| Response time                | 5 ms  |
| Readiness delay              | 300 ms  |
| <b>Connection</b>            |   |
| <b>Connection 1</b>          |   |
| Type of connection           | Connector   |
| Function                     | Voltage supply  |
| Thread size                  | M8  |
| Type                         | Male  |
| Material                     | Plastic   |
| No. of pins                  | 4 -pin  |
| <b>Mechanical data</b>       |   |
| 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<br>Via optional mounting device   |
| <b>Operation and display</b> |   |
| Type of display              | LED   |
| Number of LEDs               | 2 Piece(s)  |

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#### Environmental data

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

#### Certifications

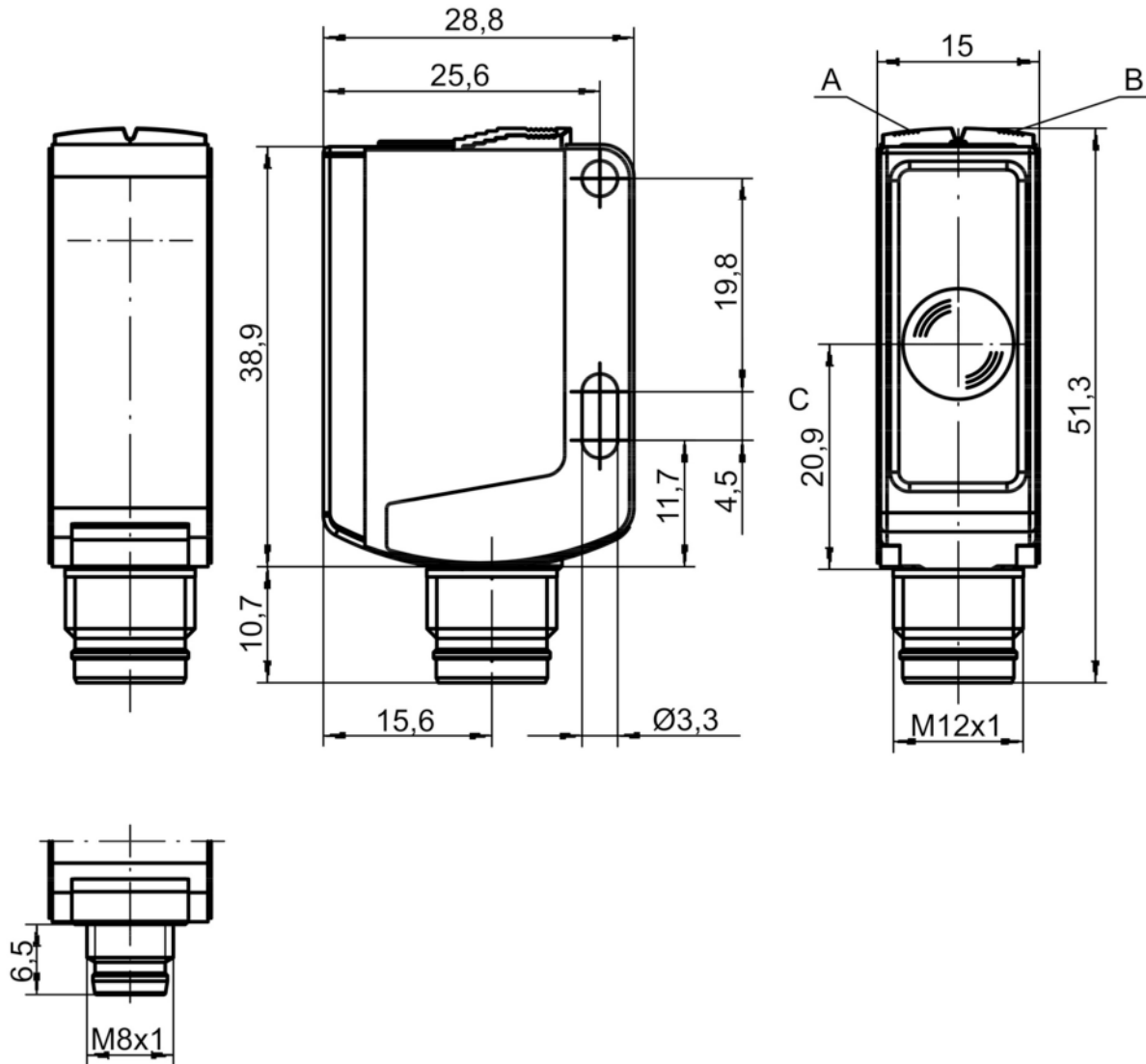
|                      |                |
|----------------------|----------------|
| Degree of protection | IP 66<br>IP 67 |
| Protection class     | II             |
| Certifications       | c UL US        |
| Standards applied    | IEC 60947-5-2  |

#### 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

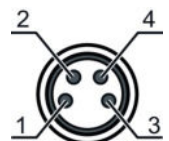


A Green LED  
 B Yellow LED  
 C Optical axis

## Electrical connection

| Connection 1       |                |
|--------------------|----------------|
| Type of connection | Connector      |
| Function           | Voltage supply |
| Thread size        | M8             |
| Type               | Male           |
| Material           | Plastic        |
| No. of pins        | 4 -pin         |

| Pin | Pin assignment |
|-----|----------------|
| 1   | V+             |
| 2   | n.c.           |
| 3   | GND            |



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| Pin | Pin assignment |
|-----|----------------|
| 4   | n.c.           |

## Operation and display

### LEDs

| 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<br>Operating range limit: 0 ... 240 m<br>Supply voltage: DC<br>Digital switching outputs: 2 Piece(s)<br>Switching output 1: Transistor, NPN, Light switching<br>Switching output 2: Transistor, NPN, Dark switching<br>Switching frequency: 100 Hz<br>Connection: Connector, M8, Plastic, 4 -pin<br>Operational controls: 270° potentiometer |
|  | 50134495 | LSE 25B/44.2-S8 | Throughbeam photoelectric sensor receiver | Application: Detection of products in bag packaging<br>Operating range limit: 0 ... 240 m<br>Supply voltage: DC<br>Digital switching outputs: 2 Piece(s)<br>Switching output 1: Transistor, PNP, Light switching<br>Switching output 2: Transistor, PNP, Dark switching<br>Switching frequency: 100 Hz<br>Connection: Connector, M8, Plastic, 4 -pin<br>Operational controls: 270° potentiometer |

## Notes

### Observe intended use!

- This product is not a safety sensor and is not intended as personnel protection.
- The product may only be put into operation by competent persons.
- Only use the product in accordance with its intended use.

### For UL applications:


- For UL applications, use is only permitted in Class 2 circuits in accordance with the NEC (National Electric Code).
- 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)

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


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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<br>Connection 2: Open end<br>Shielded: No<br>Cable length: 5,000 mm<br>Sheathing material: PVC |

### Mounting technology - Mounting brackets

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

### Mounting technology - Rod mounts

|   | Part no. | Designation  | Article         | Description   |
|---|----------|--------------|-----------------|---|
|  | 50117829 | BTP 200M-D12 | Mounting system | Design of mounting device: Protection hood<br>Fastening, at system: For 12 mm rod<br>Mounting bracket, at device: Screw type<br>Type of mounting device: Clampable, Adjustable, Turning, 360°<br>Material: Metal  |
|  | 50117255 | BTU 200M-D12 | Mounting system | Contains: 2x M3 x 16 screw, 2 M3 x 20 screws, 2x position washers<br>Design of mounting device: Mounting system<br>Fastening, at system: For 12 mm rod, Sheet-metal mounting<br>Mounting bracket, at device: Screw type, Suited for M3 screws<br>Type of mounting device: Clampable, Adjustable, Turning, 360°<br>Material: Metal |

#### Note

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