

Technical data sheet

Throughbeam photoelectric sensor

Part no.: 50141323

LSS 25B.X-S12



Figure can vary

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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
Transmitted-signal shape	Pulsed
LED group	Exempt group (in acc. with EN 62471)

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	M12
Type	Male
Material	Plastic
No. of pins	4 -pin
Encoding	A-coded

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

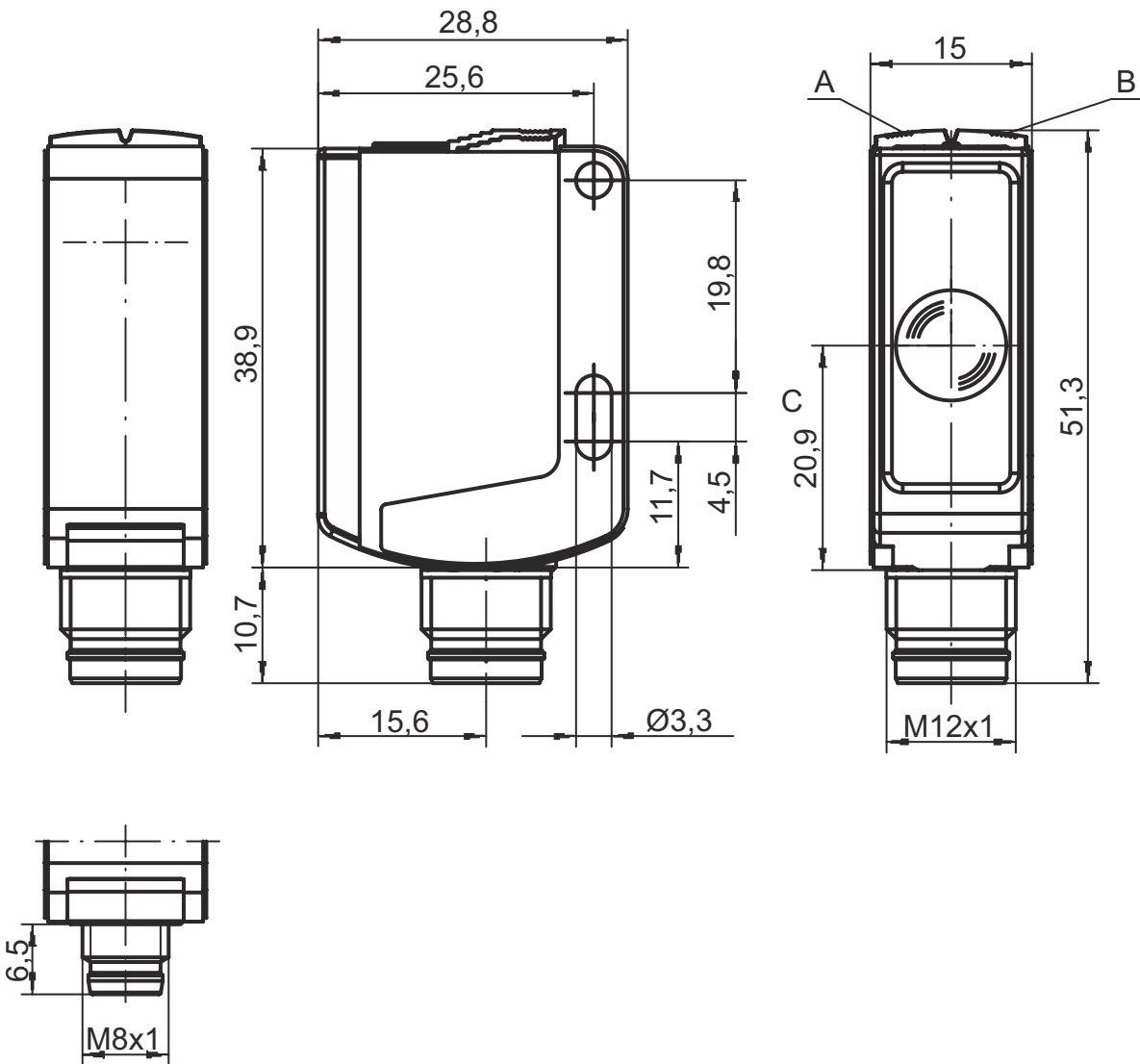
Degree of protection	IP 66 IP 67
Protection class	II
Certifications	c UL US
Standards applied	IEC 60947-5-2

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

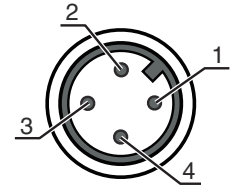
Electrical connection

Connection 1

Function	Voltage supply
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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
	50134494	LSE 25B/22.2-S12	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, M12, Plastic, 4 -pin Operational controls: 270° potentiometer
	50134493	LSE 25B/44.2-S12	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, M12, Plastic, 4 -pin 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)

Further information

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

Accessories

Connection technology - Connection cables

	Part no.	Designation	Article	Description
	50130652	KD U-M12-4A-V1-050	Connection cable	Connection 1: Connector, M12, Axial, Female, A-coded, 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.