

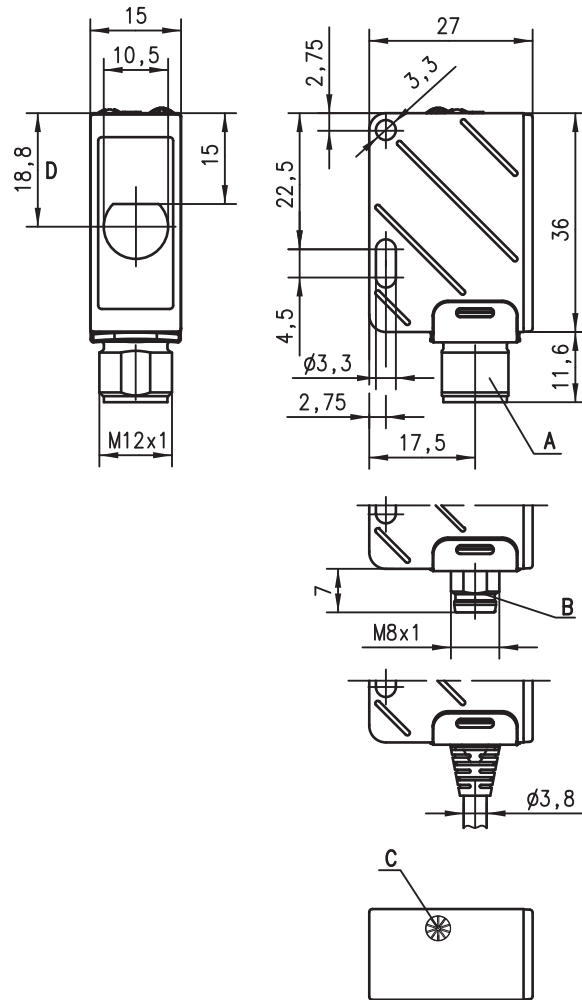
LSR 25

Throughbeam photoelectric sensors

Part No. 501 08916



Dimensioned drawing



- A** M12 connector
- B** M8 connector
- C** Indicator diode
- D** Optical axis

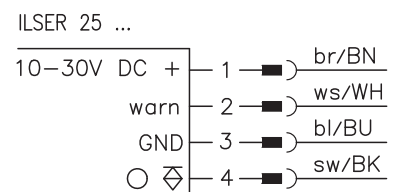
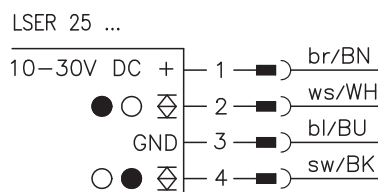
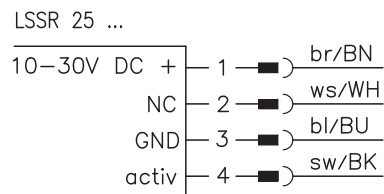


12m



- Push-pull switching outputs
- M8 and M12 connector or cable connection
- Visible red light
- Transmitter with activation input
- Very comfortable alignment

Electrical connection



Accessories:

(available separately)

- M12 connectors (KD ...)
- Ready-made cables (K-D ...)
- Mounting systems

We reserve the right to make changes • 25_a01gb.fm

Specifications

Optical data

Typ. operating range limit ¹⁾	12 m
Operating range ²⁾	8 m
Light source	LED (modulated light)
Wavelength	660 nm (visible red light)

Timing

Switching frequency	500 Hz
Response time	1 ms
Delay before start-up	≤ 100 ms

Electrical data

Operating voltage U_B	10 ... 30 VDC (incl. residual ripple)
Residual ripple	≤ 15% of U_B
Bias current	≤ 35 mA
Switching output/function	.../66 2 push-pull switching outputs ³⁾ pin 2: PNP dark switching, NPN light switching pin 4: PNP light switching, NPN dark switching
	.../4 1 PNP switching output pin 4: light switching $\geq (U_B - 2V) / \leq 2V$ max. 100 mA not adjustable
Signal voltage high/low	
Output current	
Operating range	

Indicators

LED yellow, receiver	light path free
LED yellow flashing, receiver	light path free, no performance reserve

Mechanical data

Housing	plastic
Optics cover	plastic
Weight (plug/cable)	15 g/55 g
Connection type	M8 and M12 connector, 4-pin, or cable: 2.000 mm, 4x0.2 mm ²

Environmental data

Ambient temp. (operation/storage)	-20 °C ... +55 °C / -40 °C ... +70 °C
Protective circuit ⁴⁾	2, 3
VDE safety class ⁵⁾	II, all-insulated
Protection class	IP 67, IP 69K ⁶⁾
LED class	1 (acc. to EN 60825-1)
Standards applied	IEC 60947-5-2

Options

Warning output autoControl	PNP transistor, counting principle
Signal voltage high/low	$\geq (U_B - 2V) / \leq 2V$
Output current	max. 100 mA
Activation input active	
Transmitter active/not active	$\geq 8V / \leq 2V$
Activation/disable delay	≤ 1 ms
Input resistance	10 kΩ ± 10%

- 1) Typ. operating range limit: max. attainable range without performance reserve
- 2) Operating range: recommended range with performance reserve
- 3) The push-pull switching outputs must not be connected in parallel
- 4) 2=polarity reversal protection, 3=short-circuit protection for all outputs
- 5) Rating voltage 250 V AC
- 6) IP 69K test acc. to DIN 40050 part 9 simulated, high pressure cleaning conditions without the use of additives, acids and bases are not part of the test

Order guide

	Designation	Part No.
With M12 connector		
Transmitter and receiver	LSR 25/66.8-S12	
Transmitter	LSSR 25.8-S12	500 39528
Receiver	LSER 25/66-S12	500 39529
With 2 m cable		
Transmitter and receiver	LSR 25/66.8	
Transmitter	LSSR 25.8	500 39524
Receiver	LSER 25/66	500 39525
With M8 connector		
Transmitter and receiver	LSR 25/66.8-S8	
Transmitter	LSSR 25.8-S8	500 39526
Receiver	LSER 25/66-S8	500 39527
With warning output		
With M12 connector		
Transmitter and receiver	ILSR 25/4.8-S12	
Transmitter	LSSR 25.8-S12	500 39528
Receiver	ILSER 25/4-S12	500 39531

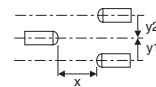
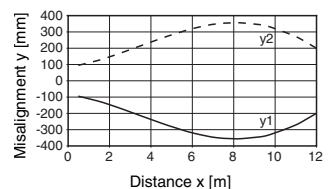
Tables

0	8	12
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<input type="checkbox"/>	Operating range [m]
<input type="checkbox"/>	Typ. operating range limit [m]

Diagrams

Typ. response behaviour



Remarks

- **Approved purpose:**
The photoelectric sensors are optical electronic sensors for optical, contactless detection of objects.