



LSR 8

Throughbeam photoelectric sensors



20m



- A²LS - active suppression of extraneous light
- Push-pull switching outputs
- M12 turning connector or cable connection
- Visible red light

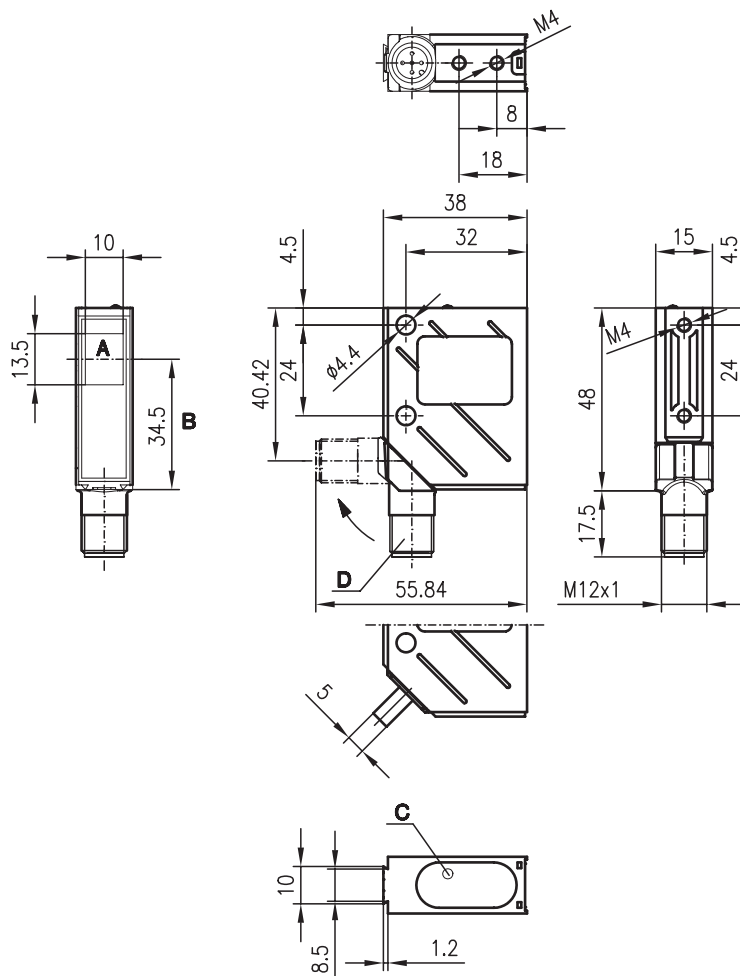


Accessories:

(available separately)

- M12 connectors (KD ...)
- Cable (KB ...)
- Mounting systems

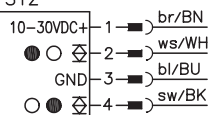
Dimensioned drawing



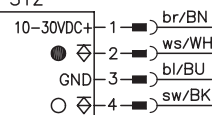
- A Transmitter/receiver
B Optical axis
C LED yellow
D 90° turning connector

Electrical connection

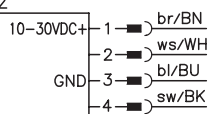
LSR 8/66
LSR 8/66-S12



LSR 8/44
LSR 8/44-S12



LSSR 8
LSSR 8-S12



Specifications

Optical data

Typ. operating range limit ¹⁾	20m
Operating range ²⁾	12m
Light source	LED (modulated light)
Wavelength	660nm (visible red light)

Timing

Switching frequency	1500Hz
Response time	0.33 ms
Delay before start-up	≤ 100ms

Electrical data

Operating voltage U_B	10 ... 30VDC
Residual ripple	≤ 15% of U_B
Bias current	≤ 35mA
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
	.../44 2 PNP switching outputs pin 2: dark switching pin 4: light switching
Signal voltage high/low	≥ ($U_B - 2V$) / ≤ 2V
Output current	max. 100mA
Sensitivity	not adjustable

Indicators

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

Mechanical data

Housing	metal
Optics cover	glass
Weight (plug/cable)	70g/140g
Connection type	M12 connector, 5-pin (turning), or cable: 2000mm, 5x0.25 mm ²

Environmental data

Ambient temp. (operation/storage)	-40°C ... +60°C / -40°C ... +70°C
Protective circuit ⁴⁾	2, 3
VDE safety class ⁵⁾	II, all-insulated
Protection class ⁶⁾	IP 67
Standards applied	IEC 60947-5-2

- 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 250VAC
- 6) In stop position of the turning connector (turning connector locked)

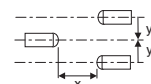
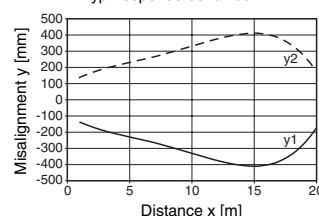
Tables

0	12	20
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	Operating range [m]
	Typ. operating range limit [m]

Diagrams

Typ. response behaviour



Order guide

	Designation	Part No.
with M12 connector		
Transmitter and receiver	LSR 8/44-S12	
Transmitter	LSSR 8-S12	500 36354
Receiver	LSER 8/44-S12	500 36356
with 2m cable		
Transmitter and receiver	LSR 8/44	
Transmitter	LSSR 8	500 36355
Receiver	LSER 8/44	500 36357
with M12 connector		
Transmitter and receiver	LSR 8/66-S12	
Transmitter	LSSR 8-S12	500 36354
Receiver	LSER 8/66-S12	500 36569
with 2m cable		
Transmitter and receiver	LSR 8/66	
Transmitter	LSSR 8	500 36355
Receiver	LSER 8/66	500 36570

Remarks