

LRT 8

Luminescence scanner

Part No. 501 09618



			0 ... 150 mm 0 ... 300 mm
10 - 30 V DC			

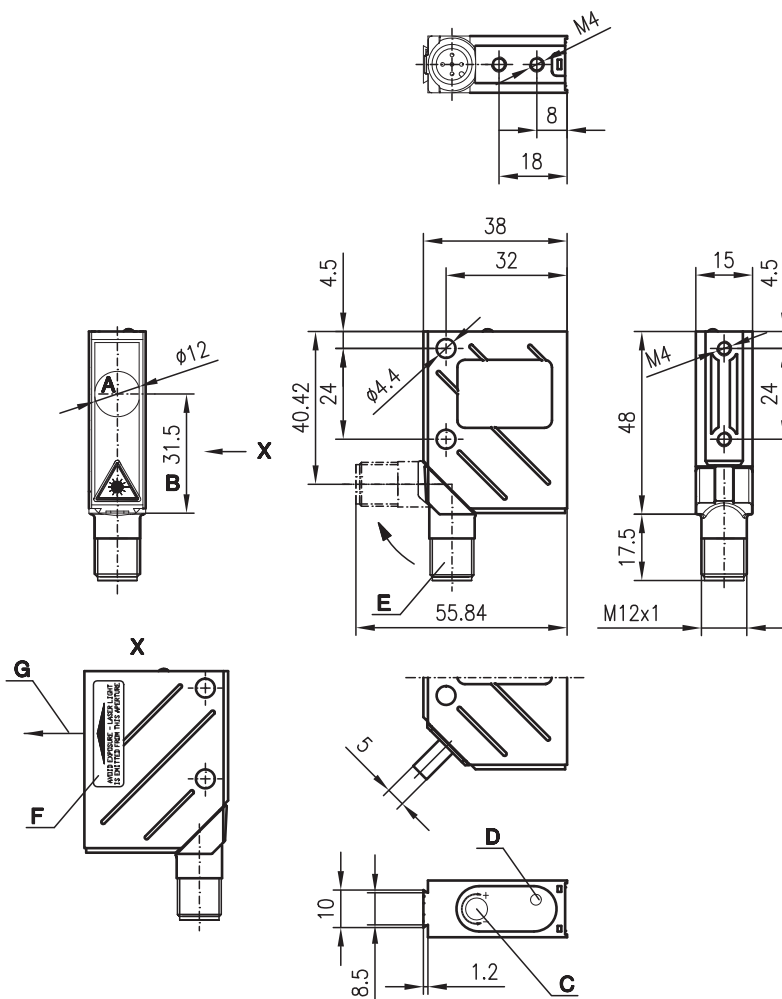
- UV LED
- The autocollimation principle used ensures that the device functions reliably over the entire range (0 ... max.)
- A²LS - Active Ambient Light Suppression
- M12 turning connector or cable connection

Accessories:

(available separately)

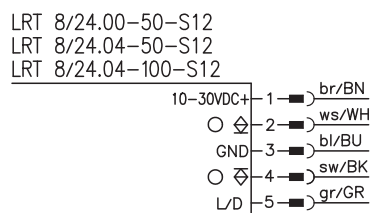
- M12 connectors (KD ...)
- Ready-made cables (K-D ...)
- Mounting systems
- Control guard

Dimensioned drawing



- A** Transmitter and receiver
- B** Optical axis
- C** Operational control
- D** Yellow LED
- E** 90° turning connector
- F** Position for warning label
- G** Beam exit

Electrical connection



We reserve the right to make changes • 8_e08gb.fm

Specifications

Optical data

Typ. scanning range limit ¹⁾	LRT 8...-50-S12 0 ... 150mm	LRT 8...-100-S12 0 ... 300mm
Light spot diameter	see diagram	
Light source	LED	
Wavelength	380nm (UV light)	
Beam spread	220mrad	
Optical power	≤ 0.75mW	
Pulse duration	10µs	
Laser warning notice	see remarks	
Average life ²⁾	100.000h	

Timing

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

Electrical data

Operating voltage U_B	10 ... 30VDC
Residual ripple	≤ 15% of U_B
Open-circuit current	≤ 35mA (10mA)
Switching output	PNP and NPN transistor output
Function characteristics	light switching (dark switching for + U_B connected to pin 5)
Signal voltage high/low	≥ ($U_B - 2V$) ≤ 2V
Output current	max. 100mA
Sensitivity	adjustable with 12-turn potentiometer

Indicators

Yellow LED	object detected
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Mechanical data

Housing	metal
Optics cover	glass
Weight (plug/cable)	70g/140g
Connection type	M12 connector, 5-pin

Environmental data

Ambient temp. (operation/storage)	-20°C ... +60°C/-40°C ... +70°C
Protective circuit ³⁾	2, 3
VDE safety class ⁴⁾	II, all-insulated
Protection class ⁵⁾	IP 67, IP 69K ⁶⁾
Laser class	1 M (acc. to EN 60825-1)
Standards applied	IEC 60947-5-2

Options

L/D input	
Dark/light switching	$U_B/0V$ or not connected
L/D delay	< 0.5ms

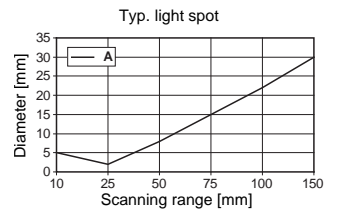
- 1) Typ. scanning range limit: max. attainable range without performance reserve
- 2) At +25°C
- 3) 2=polarity reversal protection, 3=short-circuit protection for all outputs
- 4) Rating voltage 250VAC
- 5) In stop position of the turning connector (turning connector locked)
- 6) IP 69K test acc. to 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

Selection table		Order code →				
Equipment ↓		LRT 8/24.04-50-S12 Part No. 500 41840	LRT 8/24.00-50-S12 Part No. 500 41839	LRT 8/24.04-100-S12 Part No. 501 09343		
Luminescence detection of	blue/colourless	●		●		
	red	●	●	●		
	yellow	●		●		
	yellowish green	●		●		
	orange					
Scanning range limit	150mm	●	●			
	300mm			●		

Tables

Diagrams



Remarks

LED-STRAHLUNG
NICHT DIREKT MIT OPTISCHEN
INSTRUMENTEN BETRACHTEN

Max. Leistung: 0,75mW
Impulsdauer: 10µs
Wellenlänge: 380nm

LED KLASSE 1M
DIN EN60825-1:2003-10

LASER RADIATION
DO NOT VIEW DIRECTLY
WITH OPTICAL INSTRUMENTS

Maximum Output: 0,75mW
Pulse duration: 10µs
Wavelength: 380nm

CLASS 1M LASER PRODUCT
EN60825-1:2003-10

AVOID EXPOSURE - LASER LIGHT
IS EMITTED FROM THIS APERTURE