

LRT 8

Luminescence scanner

Part No. 501 09618



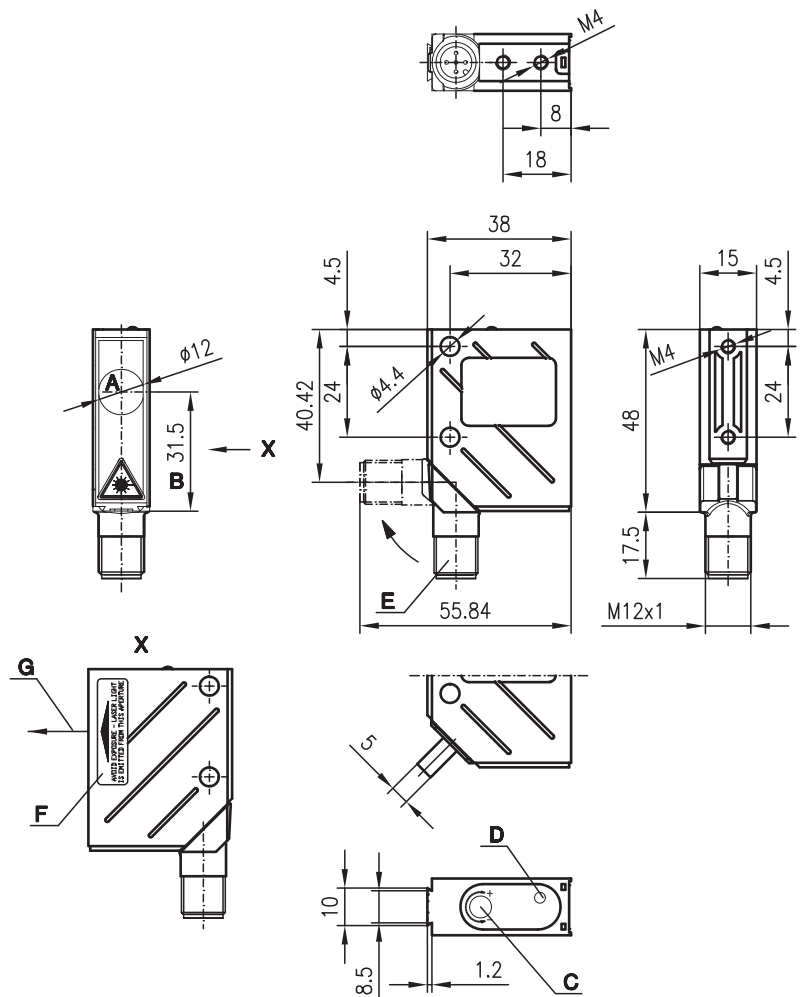
			0 ... 150 mm 0 ... 300 mm
10 - 30 V DC			

- 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:

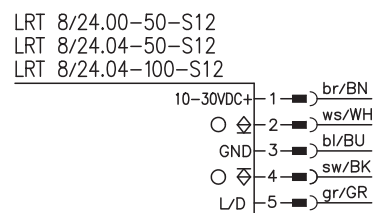
- (available separately)
- M12 connectors (KD ...)
 - Ready-made cables (K-D ...)
 - Mounting systems
 - Control guard

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⁾
 Light spot diameter
 Light source
 Wavelength
 Beam spread
 Optical power
 Pulse duration
 Laser warning notice
 Average life ²⁾

LRT 8...-50-S12

0 ... 150mm
 see diagram
 LED
 380nm (UV light)
 220mrad
 ≤ 0.75mW
 10µs
 see remarks
 100.000h

LRT 8...-100-S12

0 ... 300mm

Timing

Switching frequency
 Response time
 Delay before start-up

1500Hz
 0.33ms
 ≤ 100ms

Electrical data

Operating voltage U_B
 Residual ripple
 Open-circuit current
 Switching output
 Function characteristics
 Signal voltage high/low
 Output current
 Sensitivity

10 ... 30VDC
 ≤ 15% of U_B
 ≤ 35mA (10mA)
 PNP and NPN transistor output
 light switching (dark switching for + U_B connected to pin 5)
 ≥ ($U_B - 2V$) ≤ 2V
 max. 100mA
 adjustable with 12-turn potentiometer

Indicators

Yellow LED

object detected

Mechanical data

Housing
 Optics cover
 Weight (plug/cable)
 Connection type

metal
 glass
 70g/140g
 M12 connector, 5-pin

Environmental data

Ambient temp. (operation/storage)
 Protective circuit ³⁾
 VDE safety class ⁴⁾
 Protection class ⁵⁾
 Laser class
 Standards applied

-20°C ... +60°C/-40°C ... +70°C
 2, 3
 II, all-insulated
 IP 67, IP 69K ⁶⁾
 1 M (acc. to EN 60825-1)
 IEC 60947-5-2

Options

L/D input
 Dark/light switching
 L/D delay

$U_B/0V$ or not connected
 < 0.5ms

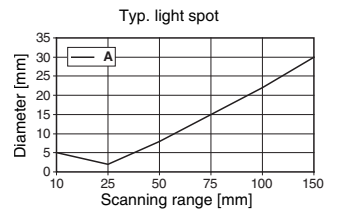
- 1) Typ. scanning range limit: max. attainable range without performance reserve
- 2) At +25°C
- 3) 2=polarity reversal protection, 3=short-circuit protection for all outputs
- 4) Rating voltage 250VAC
- 5) In stop position of the turning connector (turning connector locked)
- 6) IP 69K test acc. to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