

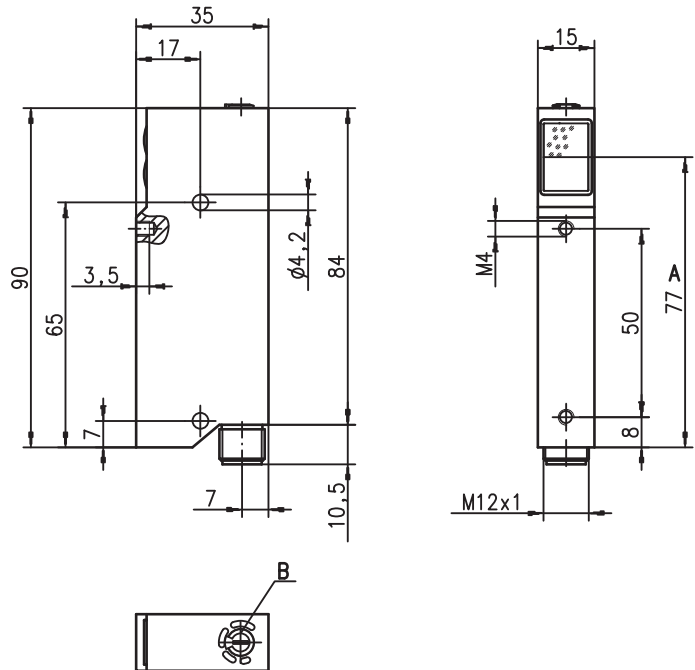
**RK 72**

**Energetic diffuse reflection light scanner**

Part No. 501 10269



**Dimensioned drawing**



**10 ... 200mm**

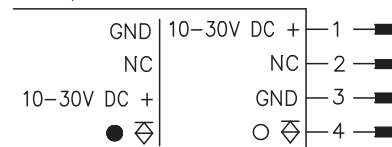


- Robust metal housing with glass lens
- For the detection of paper, sleeve and adhesive labels on glass and PET bottles
- Sensitivity adjustment

- A** Indicator diode
- B** Sensitivity adjustment

**Electrical connection**

RK 72/4-200 L.2



**Accessories:**

- (available separately)
- Mounting systems (BT 92)
  - M12 connectors (KD ...)
  - Ready-made cables (KB ...)

We reserve the right to make changes \* 72\_c03gb.fm

## Specifications

### Optical data

Typ. scanning range limit (white 90%) <sup>1)</sup>	0 ... 340mm
Scanning range <sup>2)</sup>	0 ... 200mm
Label scanning range	25 ... 50mm
Light source	LED (modulated light)
Wavelength	880nm (infrared)

### Timing

Switching frequency	150Hz
Response time	3.3ms

### Electrical data

Operating voltage $U_B$	12 ... 30VDC (incl. residual ripple)
Residual ripple	$\leq 15\%$ of $U_B$
Open-circuit current	$\leq 50$ mA
Switching output	PNP transistor output
Function characteristics	light/dark switching by reversing the polarity
Signal voltage high/low	$\geq (U_B - 3V) / \leq 2V$
Output current	max. 100mA
Sensitivity	adjustable with 270° potentiometer

### Indicators

Yellow LED	reflection
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### Mechanical data

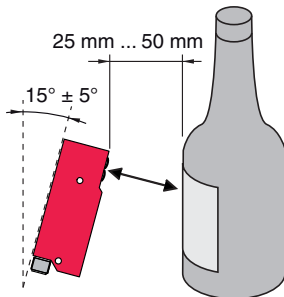
Housing	diecast
Weight	150g
Optics	glass lens
Connection type	M12 connector, 4-pin
Fitting position	inclined position $15^\circ \pm 5^\circ$ (see fitting position drawing)

### Environmental data

Ambient temp. (operation/storage)	$-20^\circ\text{C} \dots +60^\circ\text{C} / -30^\circ\text{C} \dots +70^\circ\text{C}$
Protective circuit <sup>3)</sup>	2, 3
Protection class	IP 67
LED class	1 (acc. to EN 60825-1)

- 1) Typ. scanning range limit: max. attainable range without performance reserve  
 2) Scanning range: recommended range with performance reserve  
 3) 2=polarity reversal protection, 3=short circuit protection

## Preferred fitting position



## Tables

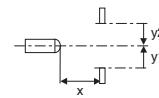
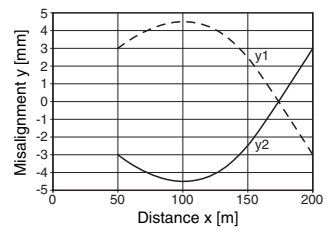
1	0	200	340
2	8	140	250
3	10	110	200

1	white 90%
2	grey 18%
3	black 6%

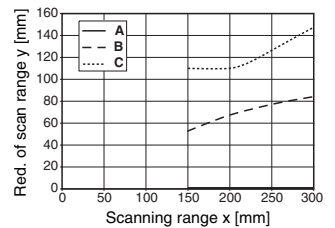
Scanning range [mm]  
 Typ. scanning range limit [mm]

## Diagrams

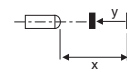
Typ. response behaviour (white 90%)



Typ. black/white behaviour



- A white 90%
- B grey 18%
- C black 6%



## Order guide

Selection table		Order code →	RK 72/4-200 L.2 Part No. 501 09617			
Equipment ↓						
Light source	infrared		●			
Connection	cable 2m					
	cable 5m					
	cable 6m					
	M12		●			
	4-pin standard plug					
Indicator LED	top of housing		●			
Features	label detection		●			
	sensitivity adjustment 270°		●			
	light/dark by reversing the polarity		●			

## Remarks

### Approved purpose:

The diffuse reflection light scanners are optical electronic sensors for optical, contactless detection of objects.

- Please note the preferred fitting position!
- There are bottle/contents/label combinations which cannot be detected reliably