

**RK 72**

**Energetic diffuse reflection light scanner**

en 02-2014/06 50110269-01

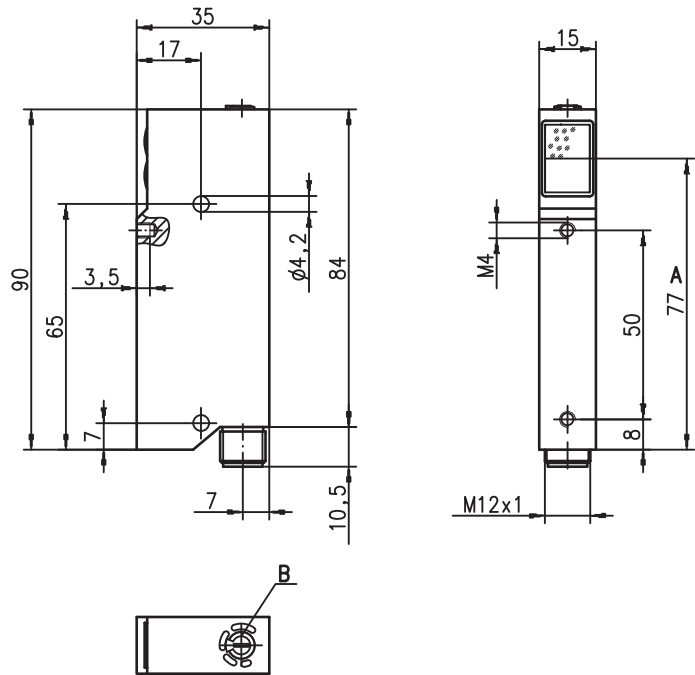


**10 ... 200mm**



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

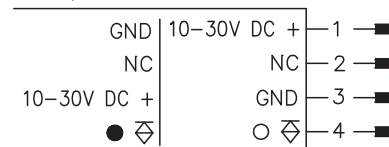
**Dimensioned drawing**



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

**Electrical connection**

RK 72/4-200 L.2



We reserve the right to make changes • DS\_RK72\_4200L2\_en\_50110269\_01.fm



**Accessories:**

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

## 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

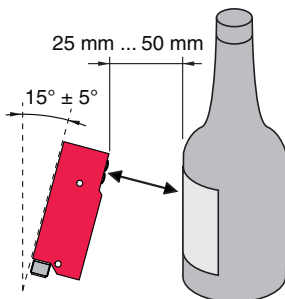
Housing	diecast
Weight	150g
Optics	glass lens
Connection type	M12 connector, 4-pin
Fitting position	inclined position $15^\circ \pm 5^\circ$ (see fitting position drawing)

### Environmental data

Ambient temp. (operation/storage)	-20°C ... +60°C / -30°C ... +70°C
Protective circuit <sup>3)</sup>	2, 3
Protection class	IP 67
Light source	exempt group (in acc. with EN 62471)
Standards applied	IEC 60947-5-2

- 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



## Order guide

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

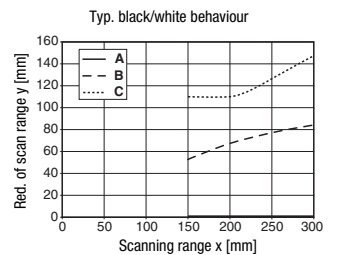
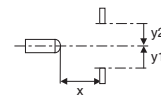
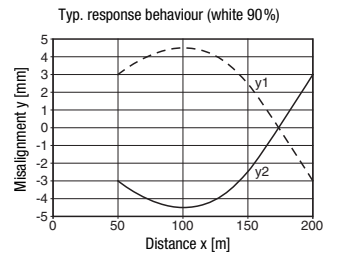
## Tables

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

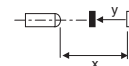
1	white 90%
2	grey 18%
3	black 6%

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

## Diagrams



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



## Remarks

### Intended use:

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

### Operate in accordance with intended use!

- ⚠ This product is not a safety sensor and is not intended as personnel protection.
- ⚠ The product may only be put into operation by competent persons.
- ⚠ Only use the product in accordance with the intended use.

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