

RK 72

Energetic diffuse reflection light scanner

Part No. 501 10271



10 ... 200mm



- Slim construction with glass lens and robust metal housing for protection against environmental influences
- LEDs as switching state indicators
- Output is short-circuit proof and polarity reversal protected, thus guaranteeing riskless commissioning
- Mounting holes and M4 threads for fast, front-side mounting
- Connection via cable

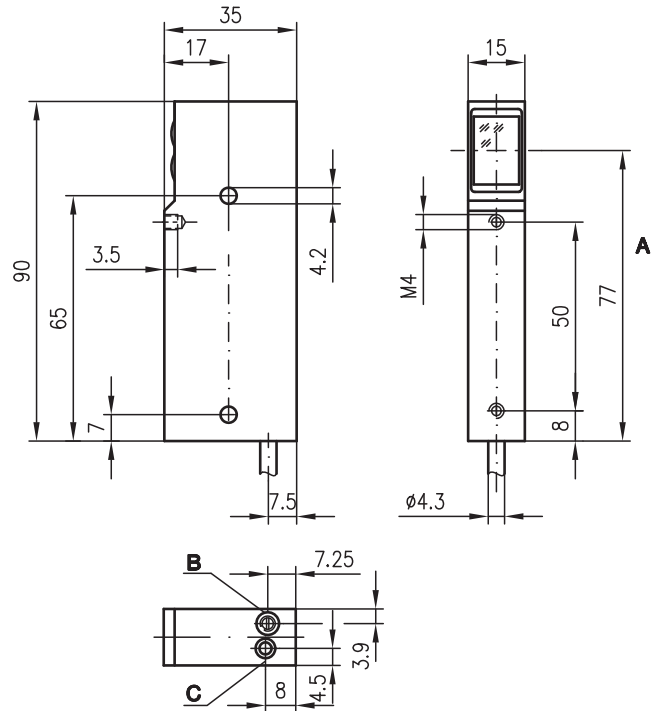


Accessories:

(available separately)

- Mounting systems (BT 92)
- M12 connectors (KD ...)

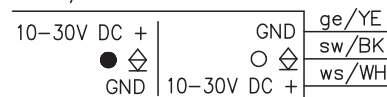
Dimensioned drawing



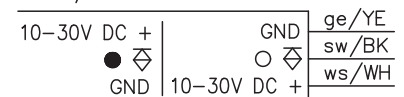
- A** Optical axis
- B** Sensitivity adjustment
- C** Indicator diode

Electrical connection

RK 72/2-200



RK 72/4-200



We reserve the right to make changes * 72_c01gb.fm

Specifications

Optical data

Typ. scanning range limit (white 90%) ¹⁾
 Scanning range ²⁾
 Light source
 Wavelength

RK 72 ...
 0 ... 340mm
 0 ... 200mm
 LED (modulated light)
 880nm (infrared)

Timing

Switching frequency
 Response time

100Hz
 5ms

Electrical data

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

12 ... 30VDC (incl. residual ripple)
 $\leq 15\%$ of U_B
 ≤ 50 mA
 PNP or NPN transistor output
 light/dark switching by reversing the polarity
 $\geq (U_B - 3V) \leq 2V$
 max. 100mA
 adjustable with 270° potentiometer

Indicators

LED red

reflection

Mechanical data

Housing
 Weight
 Optics
 Connection type

diecast
 150g
 glass lens
 cable (cross section 4x0.25mm²)

Environmental data

Ambient temp. (operation/storage)
 Protective circuit ³⁾
 Protection class
 LED class

-20°C ... +60°C/-30°C ... +70°C
 2, 3
 IP 67
 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

Tables

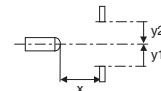
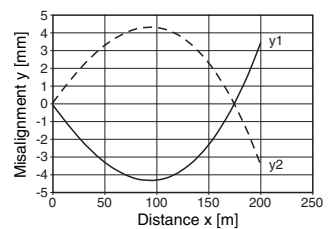
1	0	200	340
2	8	140	250
3	10	110	200

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

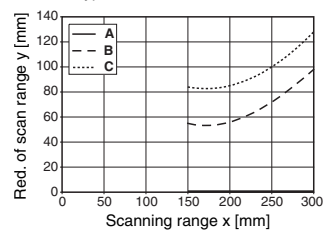
Scanning range [mm]
 Typ. scanning range limit [mm]

Diagrams

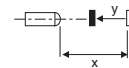
Typ. response behaviour (white 90%)



Typ. black/white behaviour



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



Order guide

Selection table		Order code →			
Equipment ↓		RK 72/2-200 Part No. 500 00408	RK 72/2-200,5000 Part No. 500 00409	RK 72/4-200 Part No. 500 00420	RK 72/4-200,5000 Part No. 500 06626
Light source	infrared	●	●	●	●
Connection	cable 2m	●		●	
	cable 5m		●		●
Indicator LED	top of housing	●	●	●	●
Features	label detection on glass				
	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.

- The upper and lower scanning range limits can change with poorly reflecting materials.