



RK 70

Energetic diffuse reflection light scanner

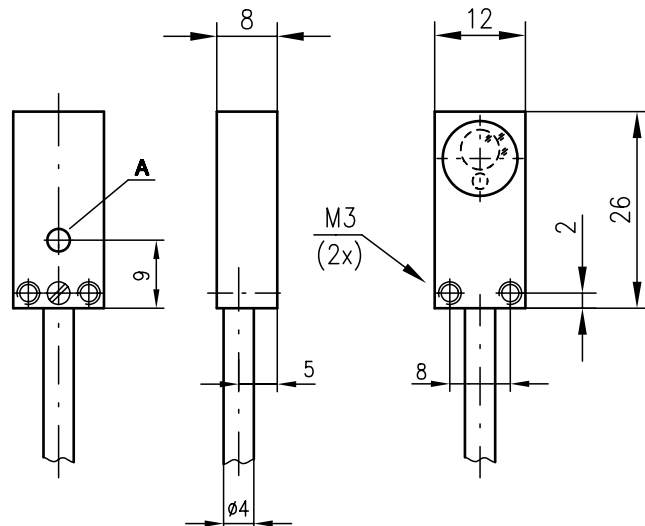


1 ... 50mm



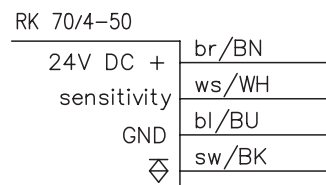
- Miniature construction with completely integrated electronics for 24V technology
- The PNP transistor output is short-circuit proof and polarity reversal protected
- Sensitivity adjustment via control line allows optimal adaptation to the applications
- Central sensitivity adjustment via multiturn potentiometer with use of the power supply unit NT 24 for up to 60 devices RK 70/4-50

Dimensioned drawing



A Indicator diode

Electrical connection



Accessories:

(available separately)

- Power supply unit NT 24 (Part No. 500 24574)

We reserve the right to make changes • MS_c04e.fm

Specifications

Optical data

Scanning range (white 90%)	1 ... 50mm
Light source	LED (modulated light)
Wavelength	880nm

Timing

Switching frequency	1000Hz
Response time	0.5ms
Delay before start-up	≤ 100ms

Electrical data

Operating voltage U_B	24VDC filtered $\pm 20\%$
Residual ripple	≤ 10% of U_B
Bias current	≤ 10mA
Switching output	PNP transistor output
Function characteristics	light switching
Signal voltage high/low	$\geq (U_B - 2V) / \leq 2V$
Output current	100mA
Sensitivity	adjustable via control line (2V ... 24VDC)
	≤ 2V → min. sensitivity
	≥ 15V ... 24V → max. sensitivity

Indicators

LED yellow on	reflection
LED yellow off	no reflection

Mechanical data

Housing	plastic
Optics cover	glass
Weight	approx. 170g
Cable length	3000mm
Cable cross-section	4x0.14mm ² +shield
Cable material	PUR

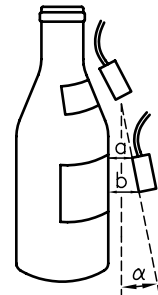
Environmental data

Ambient temp. (operation/storage)	-20°C ... +60°C / -30°C ... +70°C
Protective circuit ¹⁾	2, 3
VDE safety class	II, all-insulated
Protection class	IP 65
Standards applied	IEC 60947-5-2

1) 2=polarity reversal protection, 3=short-circuit protection for all outputs

Tables

Typical application for bottle detection



$a \approx 10\text{mm}$
 $b = 12-15\text{mm}$
 $\alpha = 6-12^\circ$

Diagrams

Order guide

	Designation	Part No.
With 3m cable	RK 70/4-50	500 26536

Remarks

- The upper and lower scanning range limit varies depending on the reflection properties of the material surface.