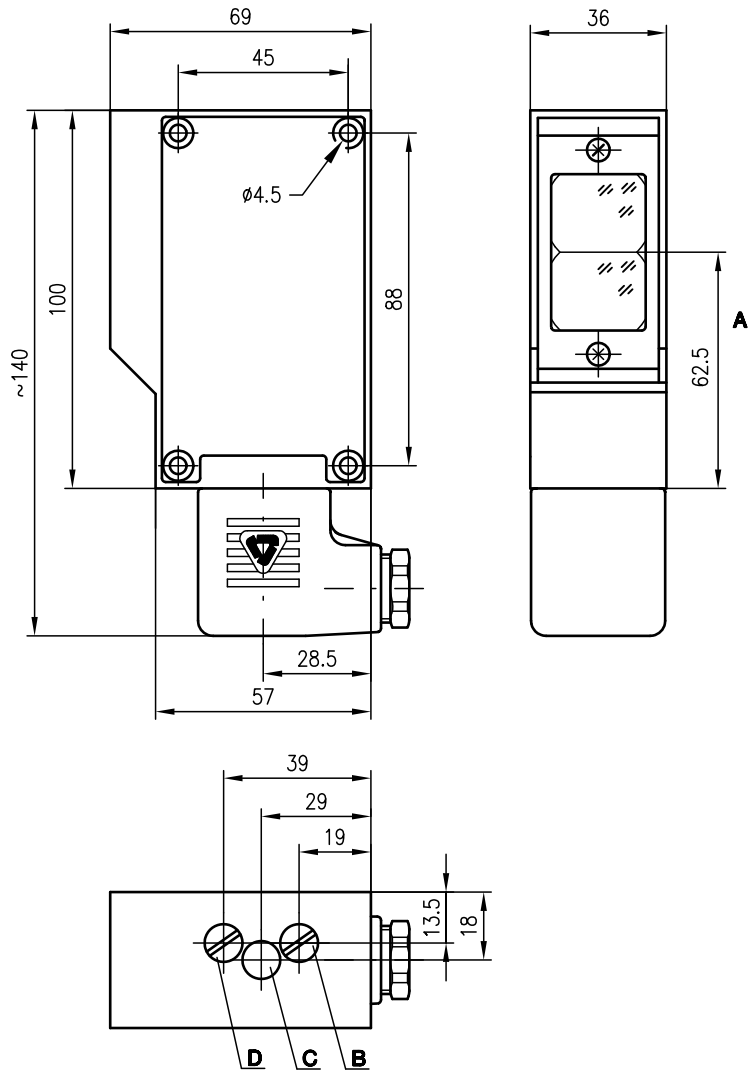


RK 85

Energetic diffuse reflection light scanner

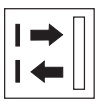
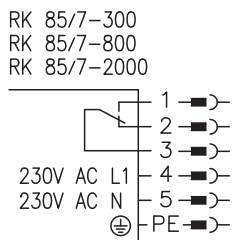
Dimensioned drawing

en 04-2010/07 50114050



- A** Optical axis
- B** Sensitivity adjustment
- C** Indicator diode
- D** Light/dark switching

Electrical connection



0 ... 0.3m
 0 ... 0.8m
 0 ... 2.0m



- AC version 230VAC with relay output
- General light/dark switching, sensitivity adjustment and delay before start-up provide for optimal adaptation to the application
- Connection via standard plug with screw connection up to 1.5mm²



Accessories:

(available separately)

- Mounting systems (BT 85)

We reserve the right to make changes • DS_RK85_7_en.fm

Specifications

Optical data

Scanning range (white 90%) ¹⁾	0 ... 300mm, 0 ... 800mm, 0 ... 2000mm
Adjustment range	5 ... 100%
Light source	LED (modulated light)
Wavelength	880nm

Timing

Sensor switching frequency	20Hz
Sensor response time	25ms
Delay before start-up	≤ 200ms

Electrical data

Operating voltage UB	230VAC ± 10% 50/60Hz
Power consumption	4VA
Switching output	relay, 1 change-over contact
Function characteristics	light or dark switching (reversible)
Switching voltage, relay	250VAC/DC
Switching current, relay	250VAC 3A/30VDC 3A
Switching power, relay	250VAC 50watts 250VAC 60VA ind. load
Sensitivity	adjustable

Indicators

Red LED	no reflection, operating voltage connected
LED green	reflection, with performance reserve
LED yellow	reflection, no performance reserve

Mechanical data

Housing	diecast aluminium
Weight	490g
Optics cover	glass
Connection type	standard plug with screw connection up to 1.5mm ²

Environmental data

Ambient temp. (operation/storage) ²⁾	-20°C ... +60°C/-30°C ... +70°C
Protective circuit ³⁾	1, 2, 3
VDE safety class	I, all-insulated
Protection class	IP 65
LED class	1 (acc. to EN 60825-1)
Standards applied	IEC 60947-5-2

Options

De-humidifying system	to prevent fogging of the optics (temperature change)
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- 1) Scanning range: recommended range with performance reserve
 2) -30°C with continuously applied operating voltage
 3) 1=transient protection, 2=polarity reversal protection, 3=short circuit protection

Order guide

Selection table		Order code →					
Equipment ↓		RK 85/7-300 Part No. 500 00607	RK 85/7-800 Part No. 500 00612	RK 85/7-2000 Part No. 500 00617			
Housing	Metal	●	●	●			
Scanning range	300 mm	●					
	800 mm		●				
	2000 mm			●			
Connection	Connectors	●	●	●			
Features							
Voltage supply	230VAC	●	●	●			
Switching output	Relay	●	●	●			
Dehumidification		●	●	●			

Tables

Diagrams

Remarks

- In the case of badly reflecting materials, the lower and upper scanning limits may change.
- **Approved purpose:**
This product may only be used by qualified personnel and must only be used for the approved purpose. This sensor is not a safety sensor and is not to be used for the protection of persons.