

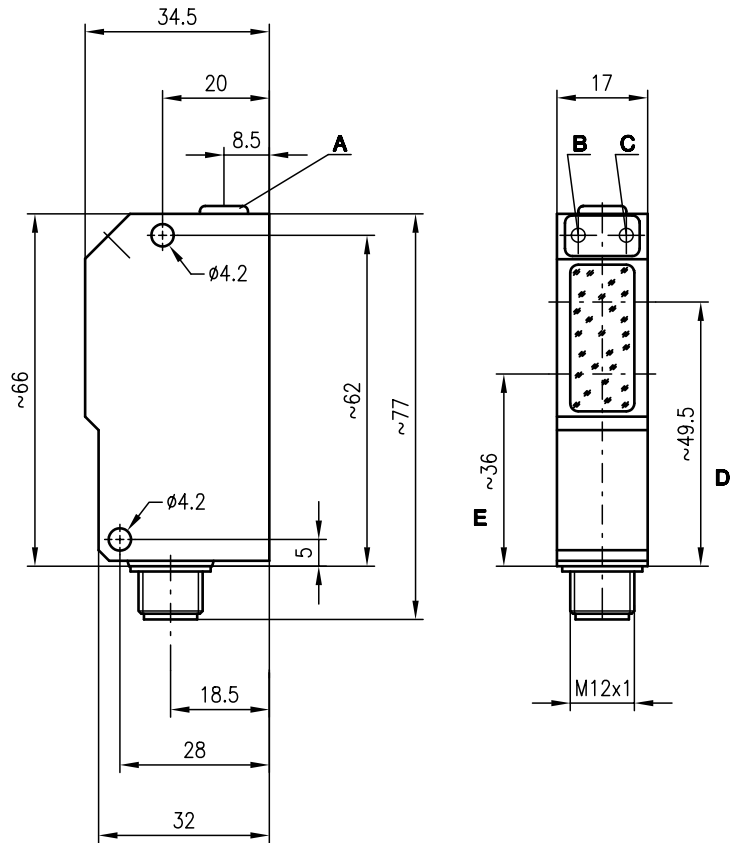


# RKR 95

# Energetic diffuse reflection light scanner



## Dimensioned drawing



- A Scanning range adjustment
- B Switching indicator yellow
- C Operation indicator green
- D Optical axis receiver
- E Optical axis transmitter

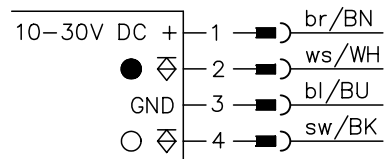


20 ... 900mm



- Energetic scanner with sensitivity adjustment using visible red light for fast and easy alignment
- High switching frequency for detection of fast events
- Small construction with glass cover and robust zinc diecast housing, protection class IP 67/IP 69K for industrial application
- Complementary switching outputs for light/dark switching or as a control function

## Electrical connection



## Accessories:

(available separately)

- Mounting systems (BT 95, UMS 1)
- M12 connectors (KD ...)

We reserve the right to make changes • 95\_c02e.fm

## Specifications

### Optical data

Typ. scanning range limit (white 90%) <sup>1)</sup>	20 ... 900mm
Scanning range <sup>2)</sup>	see tables
Adjustment range	100 ... 900mm
Light source	LED (modulated light)
Wavelength	660nm (red light)

### Timing

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

### Electrical data

Operating voltage $U_B$	10 ... 30VDC (incl. residual ripple)
Residual ripple	≤ 15% of $U_B$
Bias current	≤ 35mA
Switching output	2 PNP transistor outputs, complementary
Function characteristics	light/dark switching
Signal voltage high/low	≥ ( $U_B - 2V$ ) / ≤ 2V
Output current	max. 100mA

### Indicators

LED green	ready
LED yellow	reflection
LED yellow flashing	reflection, no performance reserve

### Mechanical data

Housing	diecast zinc
Optics cover	glass
Weight	90g
Connection type	M12 connector, stainless steel, 4-pin

### Environmental data

Ambient temp. (operation/storage) <sup>3)</sup>	-25°C (-30°C) ... +60°C/-40°C ... +70°C
Protective circuit <sup>4)</sup>	2, 3
VDE safety class <sup>5)</sup>	II, all-insulated
Protection class	IP 67, IP 69K <sup>6)</sup>
LED class	1 (acc. to EN 60825-1)
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) -30°C with operating voltage continuously applied
- 4) 2=polarity reversal protection, 3=short-circuit protection for all outputs
- 5) Rating voltage 250 VAC
- 6) IP 69K test acc. to DIN 40050 part 9 simulated, high pressure cleaning conditions without the use of additives, acids and bases are not part of the test

## Order guide

	Designation	Part No.
Red light	RKR 95/44-600 L	500 34513

## Tables

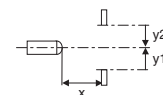
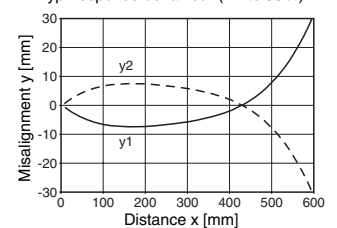
1	20	600	900
2	30	330	420
3	40	220	300

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

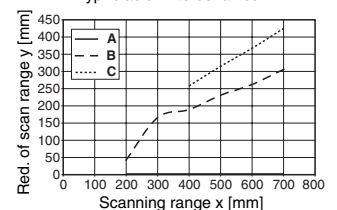
	Scanning range [mm]
	Typ. scanning range limit [mm]

## Diagrams

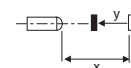
Typ. response behaviour (white 90%)



Typ. black/white behaviour



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



## Remarks

- With the set scanning range, the upper and lower scanning range limits may change depending on the reflection properties of the material surface.