

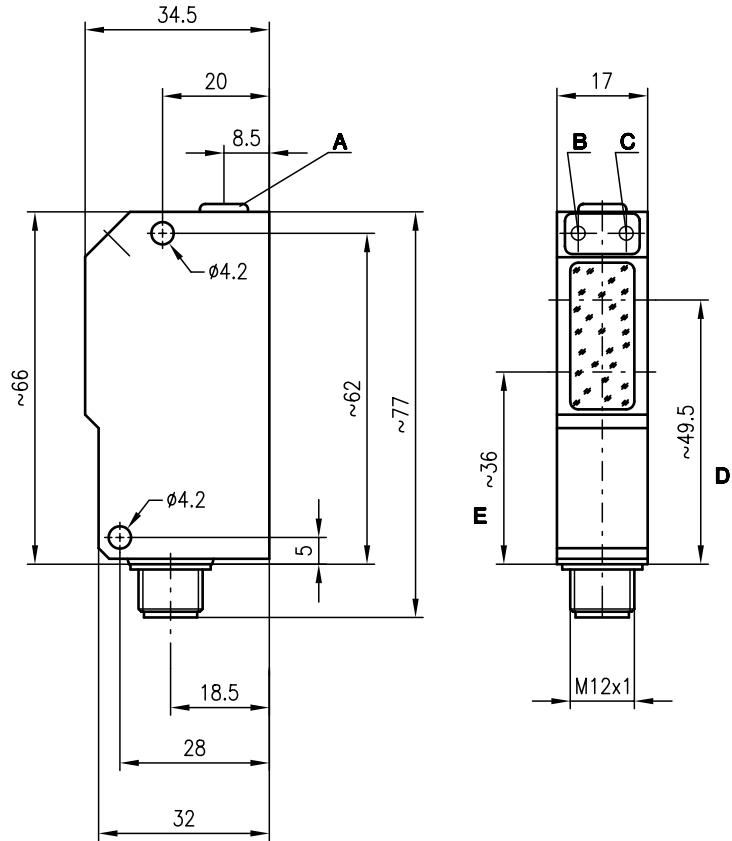


RKR 95

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

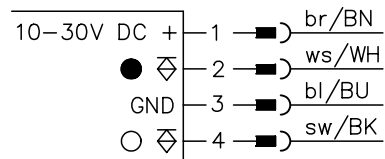


20 ... 900mm



- 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%) ¹⁾	20 ... 900mm
Scanning range ²⁾	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) ³⁾	-25°C (-30°C) ... +60°C/-40°C ... +70°C
Protective circuit ⁴⁾	2, 3
VDE safety class ⁵⁾	II, all-insulated
Protection class	IP 67, IP 69K ⁶⁾
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

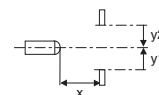
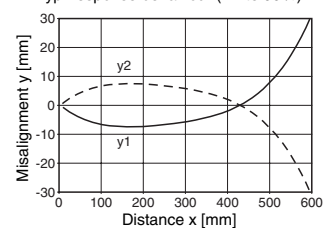
1	20	600	900
2	30	330	420
3	40	220	300

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

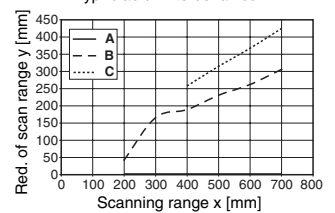
	Scanning range [mm]
	Typ. scanning range limit [mm]

Diagrams

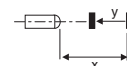
Typ. response behaviour (white 90%)



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.