

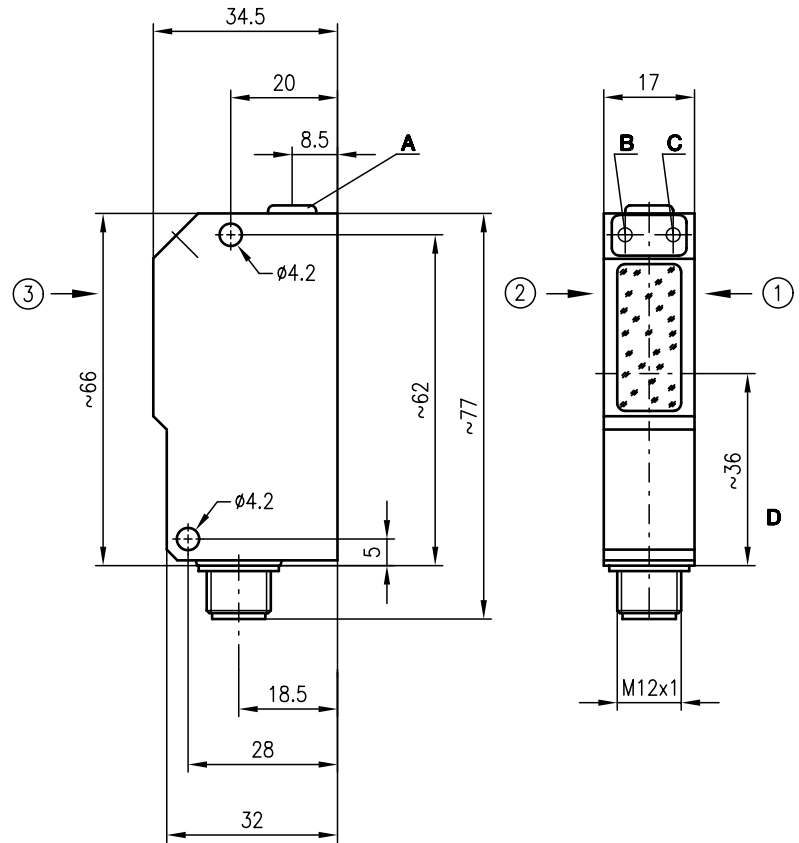


VRKR 95

Diffuse reflection light scanner with foreground suppression



Dimensioned drawing



- A Scanning range adjustment
 - B Switching indicator yellow
 - C Operation indicator green
 - D Optical axis
- Preferred entry direction for objects ①+②+③



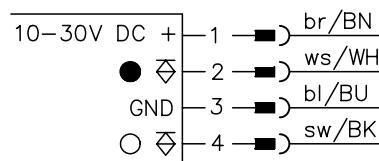
0 ... 150m



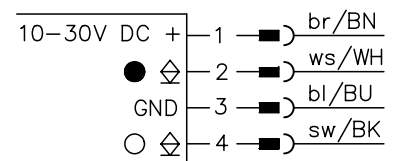
- Scanner with adjustable foreground suppression using visible red light for fast and easy alignment
- Very good black/white performance, exact adjustment via multiturn potentiometer
- High switching frequency for detection of fast events
- Small construction with glass cover and robust zinc diecast housing, protection class IP 67/IP 69K for industrial application
- Complementary switching outputs for light/dark switching or as a control function
- Mounting holes and M12 connector for fast installation

Electrical connection

VRKR 95/44-150 L



VRKR 95/22-150 L

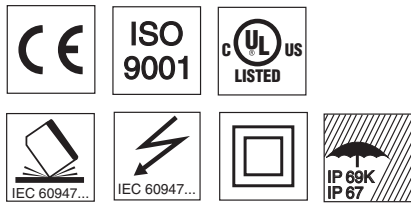


Accessories:

(available separately)

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

We reserve the right to make changes • 95_d04e.fm





Specifications

Optical data

Typ. scanning range limit (white 90%)	0 ... 150mm
Adjustment range	40 ... 150mm
Light beam characteristic	focussed at 110mm
Light source	LED (modulated light)
Wavelength	660nm

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

Mechanical data

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

Environmental data

Ambient temp. (operation/storage) ¹⁾	-25°C (-30°C) ... +60°C / -40°C ... +70°C
Protective circuit ²⁾	2, 3
VDE safety class ³⁾	II, all-insulated
Protection class	IP 67, IP 69K ⁴⁾
LED class	1 (acc. to EN 60825-1)
Standards applied	IEC 60947-5-2

1) -30°C with operating voltage continuously applied

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

3) Rating voltage 250 VAC

4) 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.
VRKR 95/22-150 L	500 33201
VRKR 95/44-150 L	500 25613

Tables

Remarks

Scanning range calibration on existing background

- The scanner is adjusted to the background using the light spot. The prescribed distance of 150mm may not be exceeded.
- The adjustment screw (10-turn potentiometer) is completely turned out. The yellow LED must be off.
- The adjustment screw is turned back until the yellow LED illuminates.
- As a check, the object to be scanned is placed in the beam. The yellow LED may not illuminate over the entire range from 0mm to the reference surface.

Attention!

When operating the scanner with the minimum scanning range setting (10-turn potentiometer), operation within the given specifications cannot be guaranteed.