

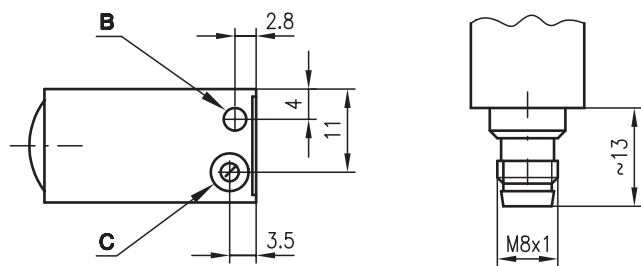
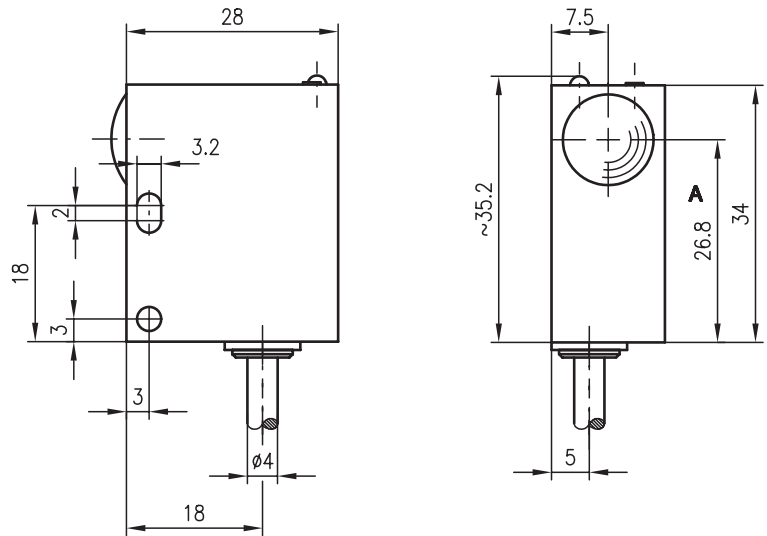


RK 713

Diffuse reflection light scanner with lustre function



Dimensioned drawing



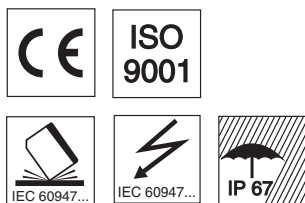
- A** Optical axis
- B** Indicator diode
- C** Sensitivity adjustment

50 ... 150mm



- Detection of objects with metallic lustre
- Focussed light spot at 90mm scanning distance
- High switching frequency of 2.5kHz

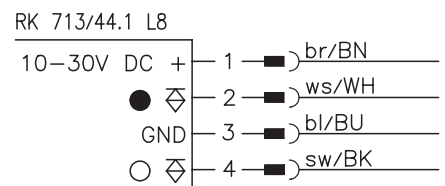
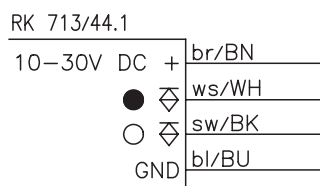
Electrical connection



Accessories:

(available separately)

- Mounting system (BT 713)
- Wobble plate (SET BT 713-66 + BT 66)
- M8 connectors (KD ...)
- Ready-made cables (KB ...)
- Reflectors
- Reflective tapes



We reserve the right to make changes • 713_c01e.fm



Specifications

Optical data

Typ. scanning range limit (for stainless steel) ¹⁾	50 ... 150mm
Scanning range ²⁾	80 ... 120mm
Light spot diameter	approx. 2mm at a distance of 90mm
Light source	LED (modulated light)
Wavelength	660nm (visible red light)

Timing

Switching frequency	2.5kHz
Response time	0.2ms
Delay before start-up	≤ 100ms

Electrical data

Operating voltage U _B	10 ... 30VDC (incl. residual ripple)
Residual ripple	≤ 15% of U _B
Bias current	≤ 30mA
Switching output	2 PNP transistor outputs, complementary
Function characteristics	light/dark switching
Signal voltage high/low	≥ (U _B -2V) ≤ 2V
Output current	max. 200mA
Sensitivity	adjustable with 270° potentiometer

Indicators

LED yellow	light path free
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Mechanical data

Housing	metal
Optics	glass
Weight	100g
Connection type	M8 connector (4-pin) cable 2000mm, 4x0.14mm ²

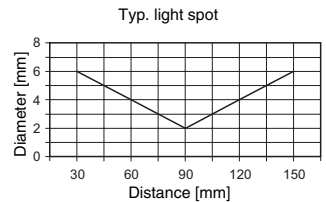
Environmental data

Ambient temp. (operation/storage)	-20°C ... +60°C/-40°C ... +70°C
Protective circuit ³⁾	1, 2, 3, 4
VDE safety class	III
Protection class	IP 67
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) 1=transient protection, 2=polarity reversal protection, 3=short circuit protection for all outputs, 4=interference blanking

Tables

Diagrams



Order guide

Selection table		Order code →																	
Equipment ↓		RK 713/44.1 Part No. 500 22813	RK 713/44.1 L8 Part No. 500 80319																
Light spot	divergent																		
	focussed	●	●																
LED	on top	●	●																
	at the back																		
Connection	cable	●																	
	M8 connector		●																
Features	shiny reflection	●	●																
	polarisation																		
	sensitivity adjustment	●	●																

Remarks

- Light spot focussed at 90mm. Shiny surfaces (e.g. polished metal) can be used as reflective surface at distances of approx. 80mm to approx. 120mm.