



RZC1-04ZRS-KU0

RZC1

CYLINDER SENSORS

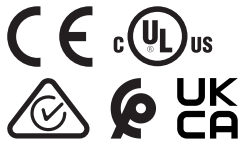
SICK
Sensor Intelligence.



Ordering information

Type	part no.
RZC1-04ZRS-KU0	1059746

Other models and accessories → www.sick.com/RZC1



Detailed technical data

Features

Cylinder type	C-slot
Cylinder types with adapter	SMC rail CDQ2 SMC rail ECDQ2
Housing length	26.3 mm
Switching output	Reed
Switching frequency	500 Hz
Output function	NO
Electrical wiring	AC/DC 3-wire
Enclosure rating	IP68 ¹⁾ IP69K ²⁾

¹⁾ According to EN 60529 (IP 67 / IP 68).

²⁾ According to DIN 40050 (IP 69K).

Mechanics/electronics

Supply voltage	5 V AC/DC ... 30 V AC/DC
Power consumption	5 mA, without load
Voltage drop	< 0.5 V
Continuous current I_a	≤ 500 mA
Switching capacity	≤ 10 W
Protection class	III
Overrun distance, typ.	7 mm ¹⁾
Reproducibility	≤ 0.1 mT ²⁾
Status indicator LED	Yes
Teach-in	No
Ambient operating temperature	-30 °C ... +80 °C

¹⁾ Distance covered by the encoder magnet while the sensor outputs a switching signal.

²⁾ Supply voltage U_B and constant ambient temperature T_a.

Shock and vibration resistance	30 g, 11 ms / 10 ... 55 Hz, 1 mm
EMC	According to EN 60947-5-2
Connection type	Cable, 3-wire, stripped, 2 m
Connection type Detail	
Conductor cross section	0.09 mm ²
Cable diameter	Ø 2.2 mm
Bending radius	With fixed installation > 2 x cable diameter
	For flexible use > 5 x cable diameter
Cable outlet	Axial
Material	
Housing	Plastic, PA, strengthened
Cable	PUR
UL File No.	NRKH.E181493 & NRKH7.E181493

¹⁾ Distance covered by the encoder magnet while the sensor outputs a switching signal.

²⁾ Supply voltage U_B and constant ambient temperature T_a .

Safety-related parameters

MTTF_D	41,230 years
DC_{avg}	0 %
T_M (mission time)	20 years
B_{10D}	5,000,000 Switching cycles ¹⁾

¹⁾ Only for devices containing electro-mechanical components. In this case, the MTTF_D value of the entire device must be calculated from the given B_{10D} value, the number of switching cycles and the given MTTF_D value.

Certificates

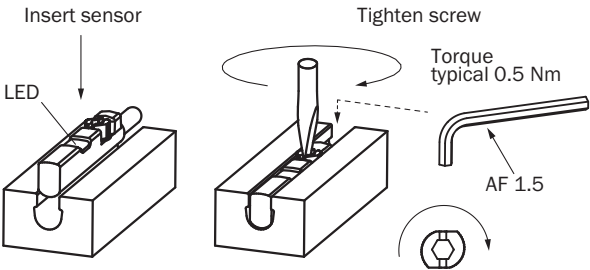
EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓
China RoHS	✓
cULus certificate	✓

Classifications

ECLASS 5.0	27270104
ECLASS 5.1.4	27270104
ECLASS 6.0	27270104
ECLASS 6.2	27270104
ECLASS 7.0	27270104
ECLASS 8.0	27270104
ECLASS 8.1	27270104
ECLASS 9.0	27270104
ECLASS 10.0	27270104
ECLASS 11.0	27270104
ECLASS 12.0	27274301

ETIM 5.0	EC002544
ETIM 6.0	EC002544
ETIM 7.0	EC002544
ETIM 8.0	EC002544
UNSPSC 16.0901	39122230

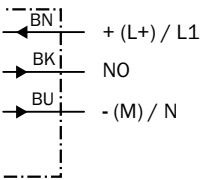
Installation note



Connection type



Connection diagram Cd-035



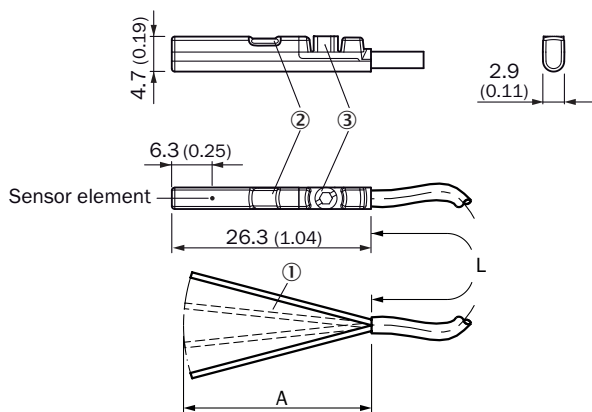
Functional principle Overrun distance



Note: Sensor housing may differ; representation corresponds to “NO contact” output function; overrun distance = switching point width + hysteresis

- ① Position sensor element
- ② Width of the switching point
- ③ Hysteresis
- ④ Direction of movement of the magnet

Dimensional drawing Cable



Dimensions in mm (inch)

① Connection

② Display LED

③ Fixing screw SW 1.5

		L	A	
1059746	RZC1-04ZRS-KU0	2 m	31.5	3
1059750	RZC1-04ZUS-KU0	2 m	31.5	2
1065397	RZC1-04ZUS-KU0S01	2 m	31.5	2
1070035	RZC1-04ZUS-KUAS02	3 m	31.5	2
1059749	RZC1-04ZRS-KUB	5 m	31.5	3
1073286	RZC1-04ZUS-KUBS03	5 m	31.5	2

Recommended accessories

Other models and accessories → www.sick.com/RZC1

	Brief description	Type	part no.
connectors and cables			
	Description: Sensor/actuator cable Connection type head A: Male connector, M8, 3-pin, straight, A-coded Signal type: Sensor/actuator cable Connection systems: IDC quick connection Permitted cross-section: 0.08 mm² ... 0.25 mm²	YM08U13-0002K1823A	2122277

	Brief description	Type	part no.
Mounting systems			
	Description: Mounting bracket on round body cylinder with piston diameter of 1 mm ... 130 mm, ambient temperature min -30 °C max 80 °C Material: Stainless steel, Aluminum Details: Stainless steel, Aluminum Packing unit: 1 piece Suitable for: C-slot	BEF-KHZ-RC1-130	2077686
	Description: Mounting bracket on round body cylinder with piston diameter of 12 mm, ambient temperature min 0 °C max 50 °C Material: Plastic, Aluminum Details: Plastic, Aluminum Packing unit: 1 piece Suitable for: C-slot	BEF-KHZ-RC-12	2077673
	Description: Mounting bracket on round body cylinder with piston diameter of 1 mm ... 25 mm, ambient temperature min -30 °C max 80 °C Material: Stainless steel, Aluminum Details: Stainless steel, Aluminum Packing unit: 1 piece Suitable for: C-slot	BEF-KHZ-RC1-25	2077685
	Description: Mounting bracket on round body cylinder with piston diameter of 16 mm, ambient temperature min 0 °C max 50 °C Material: Plastic, Aluminum Details: Plastic, Aluminum Packing unit: 1 piece Suitable for: C-slot	BEF-KHZ-RC-16	2077672
	Description: Mounting bracket on round body cylinder with piston diameter of 20 mm, ambient temperature min 0 °C max 50 °C Material: Plastic, Aluminum Details: Plastic, Aluminum Packing unit: 1 piece Suitable for: C-slot	BEF-KHZ-RC-20	2077671
	Description: Mounting bracket on round body cylinder with piston diameter of 25 mm, ambient temperature min 0 °C max 50 °C Material: Plastic, Aluminum Details: Plastic, Aluminum Packing unit: 1 piece Suitable for: C-slot	BEF-KHZ-RC-25	2077670
	Description: Mounting bracket on round body cylinder with piston diameter of 32 mm, ambient temperature min 0 °C max 50 °C Material: Plastic, Aluminum Details: Plastic, Aluminum Packing unit: 1 piece Suitable for: C-slot	BEF-KHZ-RC-32	2077669
	Description: Mounting bracket on round body cylinder with piston diameter of 40 mm, ambient temperature min 0 °C max 50 °C Material: Plastic, Aluminum Details: Plastic, Aluminum Packing unit: 1 piece Suitable for: C-slot	BEF-KHZ-RC-40	2077668
	Description: Mounting bracket on round body cylinder with piston diameter of 50 mm, ambient temperature min 0 °C max 50 °C Material: Plastic, Aluminum Details: Plastic, Aluminum Packing unit: 1 piece Suitable for: C-slot	BEF-KHZ-RC-50	2077667
	Description: Mounting bracket on round body cylinder with piston diameter of 63 mm, ambient temperature min 0 °C max 50 °C Material: Plastic, Aluminum Details: Plastic, Aluminum Packing unit: 1 piece Suitable for: C-slot	BEF-KHZ-RC-63	2077666
	Description: Mounting bracket for integrated profile cylinder/tie-rod cylinder Material: Zinc diecast Details: Zinc diecast Items supplied: Mounting hardware included	BEF-KHZ-PC1	2076170

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

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