RZC1-04ZUS-KU0

RZC1

SENSORS FOR C-SLOT CYLINDERS

SICK
Sensor Intelligence.

Ordering information

Type	Part no.
RZC1-04ZUS-KU0	1059750

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 2-wire
Enclosure rating	IP67 [1]

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

Mechanics/electronics

Supply voltage	5 V AC/DC ... 120 V AC/DC
Rated insulation voltage U_i	125 V
Rated impulse withstand voltage U_{imp}	2.5 kV
Power consumption	5 mA, without load
Voltage drop	< 3.2 V
Continuous current I_a	≤ 50 mA
Switching capacity	≤ 6 W
Protection class	II [1] [2]
Overrun distance, typ.	7 mm
Reproducibility	≤ 0.1 mT [3]
Status indicator LED	Yes
Ambient operating temperature	−30 °C ... +80 °C
Shock and vibration resistance	30 g, 11 ms / 10 ... 55 Hz, 1 mm

[1] The sensor may only be used when mounted as a complete unit in the slot.
[2] Overvoltage category II.
[3] Supply voltage U_B and constant ambient temperature Ta.

EMC	According to EN 60947-5-2
Connection type	Cable, 2-wire, 2 m
Connection type Detail	
Conductor cross section	0.09 mm²
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

[1] The sensor may only be used when mounted as a complete unit in the slot.

[2] Overvoltage category II.

[3] Supply voltage U_B and constant ambient temperature Ta.

Safety-related parameters

| $MTTF_D$	6,415 years
DC_{avg}	0 %
T_M (mission time)	20 years
B_{10d}	30,000,000 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.

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

Connection diagram

Cd-037

```
BN ───► + (L+) / L1
BU ───► - (M) / N
```
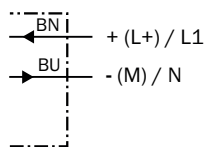
Dimensional drawing (Dimensions in mm (inch))

Cable

4.7 (0.19)

2.9 (0.11)

6.3 (0.25)

Sensor element

26.3 (1.04)

L

①

A
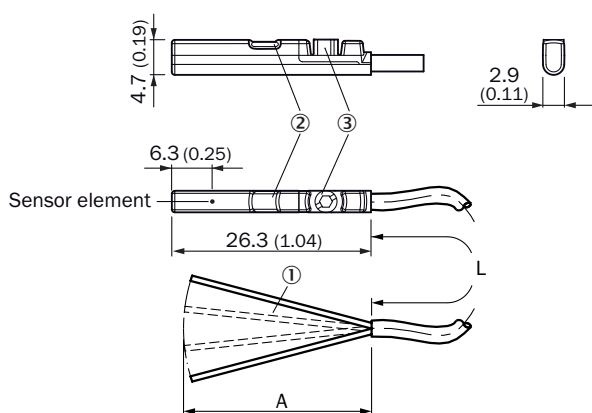
① Connection
② Display LED
③ Fixing screw SW 1.5

		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.
Brackets for cylinder sensors		
Mounting bracket for integrated profile cylinder/tie-rod cylinder, zinc diecast, mounting hardware included	BEF-KHZ-PC1	2076170

	Brief description	Type	Part no.
	1 piece, Mounting bracket on round body cylinder with piston diameter of 12 mm, ambient temperature min 0 °C max 50 °C, plastic, Aluminum	BEF-KHZ-RC-12	2077673
	1 piece, Mounting bracket on round body cylinder with piston diameter of 16 mm, ambient temperature min 0 °C max 50 °C, plastic, Aluminum	BEF-KHZ-RC-16	2077672
	1 piece, Mounting bracket on round body cylinder with piston diameter of 20 mm, ambient temperature min 0 °C max 50 °C, plastic, Aluminum	BEF-KHZ-RC-20	2077671
	1 piece, Mounting bracket on round body cylinder with piston diameter of 25 mm, ambient temperature min 0 °C max 50 °C, plastic, Aluminum	BEF-KHZ-RC-25	2077670
	1 piece, Mounting bracket on round body cylinder with piston diameter of 32 mm, ambient temperature min 0 °C max 50 °C, plastic, Aluminum	BEF-KHZ-RC-32	2077669
	1 piece, Mounting bracket on round body cylinder with piston diameter of 40 mm, ambient temperature min 0 °C max 50 °C, plastic, Aluminum	BEF-KHZ-RC-40	2077668
	1 piece, Mounting bracket on round body cylinder with piston diameter of 50 mm, ambient temperature min 0 °C max 50 °C, plastic, Aluminum	BEF-KHZ-RC-50	2077667
	1 piece, Mounting bracket on round body cylinder with piston diameter of 63 mm, ambient temperature min 0 °C max 50 °C, plastic, Aluminum	BEF-KHZ-RC-63	2077666
	1 piece, Mounting bracket on round body cylinder with piston diameter of 1 mm ... 130 mm, ambient temperature min –30 °C max 80 °C, stainless steel, Aluminum	BEF-KHZ-RC1-130	2077686
	1 piece, Mounting bracket on round body cylinder with piston diameter of 1 mm ... 25 mm, ambient temperature min –30 °C max 80 °C, stainless steel, Aluminum	BEF-KHZ-RC1-25	2077685

Online data sheet

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."

WORLDWIDE PRESENCE:

Contacts and other locations –**www.sick.com**

SICK AG | Waldkirch | Germany | www.sick.com

SICK
Sensor Intelligence.