



RZC1-04ZUS-KQ0S04

RZC1

CYLINDER SENSORS

SICK
Sensor Intelligence.



Ordering information

Type	part no.
RZC1-04ZUS-KQ0S04	1125038

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	100 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 ... 30 V AC/DC
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	No
Teach-in	No
Ambient operating temperature	-30 °C ... +80 °C
Shock and vibration resistance	30 g, 11 ms / 10 ... 55 Hz, 1 mm
EMC	According to EN 60947-5-2

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.

Connection type	Cable with connector M12, 4-pin, with knurled nut, 0.3 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

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	6,415 years
DC_{avg}	0 %
B_{10D}	5,000,000 Switching cycles ¹⁾

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

Certificates

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

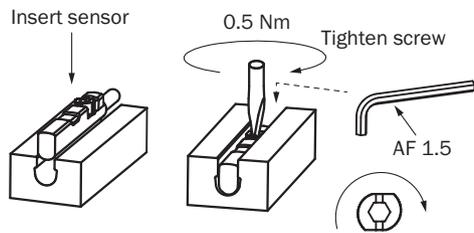
Classifications

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

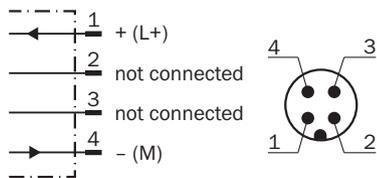
UNSPSC 16.0901

39122230

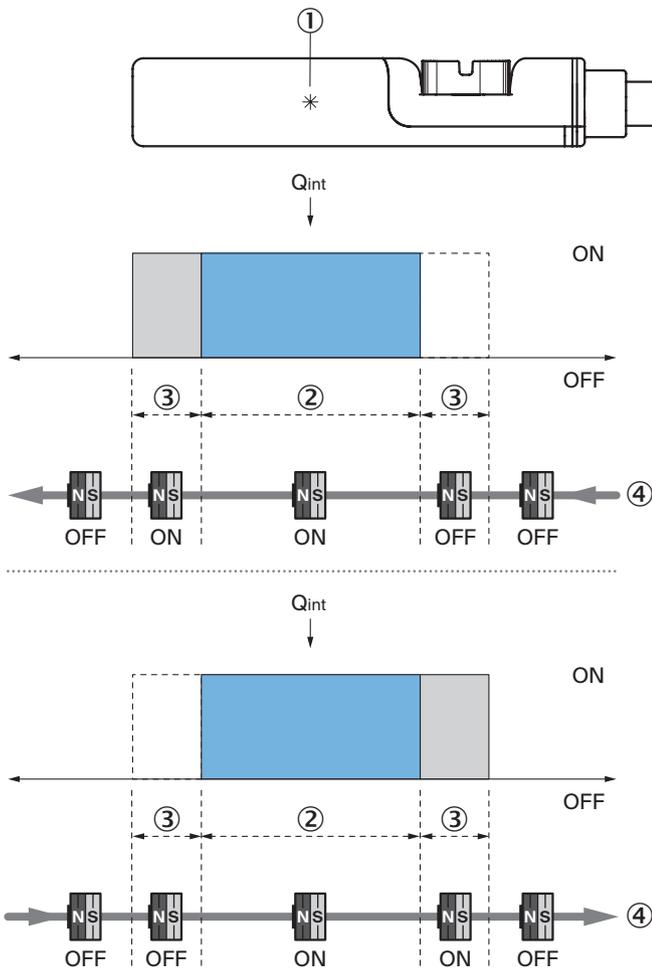
Installation note



Connection diagram Cd-443



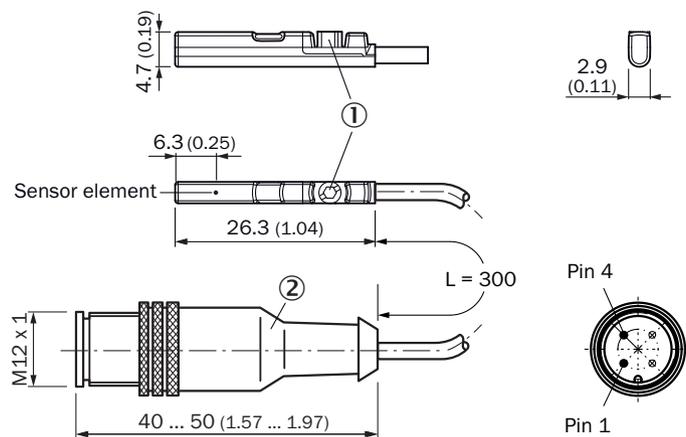
Functional principle Overrun distance



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 with plug M12, with knurled nut



Dimensions in mm (inch)

① Fixing screw SW 1.5

② Connection

Recommended accessories

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

	Brief description	Type	part no.
Mounting systems			
	<ul style="list-style-type: none"> 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
	<ul style="list-style-type: none"> 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
	<ul style="list-style-type: none"> 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
	<ul style="list-style-type: none"> 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
	<ul style="list-style-type: none"> 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
	<ul style="list-style-type: none"> 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
	<ul style="list-style-type: none"> 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
	<ul style="list-style-type: none"> 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
	<ul style="list-style-type: none"> 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
	<ul style="list-style-type: none"> 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
	<ul style="list-style-type: none"> 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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