

RZT7-03ZUSTKUA

RZT7

CYLINDER SENSORS





Ordering information

Туре	part no.
RZT7-03ZUSTKUA	1093627

Other models and accessories → www.sick.com/RZT7



Detailed technical data

Features

Cylinder type	T-slot
Cylinder types with adapter	Profile cylinder Tie rod cylinder Round body cylinder Dovetail groove cylinder SMC rail CDQ2 SMC rail ECDQ2
Housing length	29.5 mm
Switching output	Reed
Switching frequency	400 Hz
Output function	NO
Electrical wiring	AC/DC 2-wire
Enclosure rating	IP65 ¹⁾ IP67
Special features	Extended operating temperature

 $^{^{1)}}$ According to EN 60529.

Mechanics/electronics

Supply voltage	10 V AC/DC 30 V AC/DC
Voltage drop	≤ 3.5 V
Continuous current I _a	\leq 100 mA $^{1)}$
Switching capacity	≤ 6 W
Protection class	III
Response sensitivity, typ.	3 mT
Overrun distance, typ.	10 mm ²⁾
Reproducibility	\leq 0.1 mT $^{3)}$

¹⁾ AC/DC.

²⁾ Distance covered by the encoder magnet while the sensor outputs a switching signal.

 $^{^{\}rm 3)}$ Supply voltage U_B and constant ambient temperature Ta.

Status indicator LED	No
Teach-in	No
Ambient operating temperature	-20 °C +120 °C
Shock and vibration resistance	30 g, 11 ms / 10 55 Hz, 1 mm
EMC	According to EN 60947-5-2
Connection type	Cable, 2-wire, stripped, 3 m
Connection type Detail	
Conductor cross section	0.14 mm ²
Cable diameter	Ø 2.9 mm
Bending radius	With fixed installation > 3 x cable diameter
	For flexible use > 10 x cable diameter
Torsion force	± 270° / 10 cm
Torsion cycles	> 2,000,000
Cable outlet	Axial
Material	
Housing	Plastic, Grilamid LVX-65H SST
Cable	PUR/TPE

 $^{^{1)}}$ AC/DC.

Safety-related parameters

MTTF _D	23,876 years
DC _{avg}	0 %
T_{M} (mission time)	20 years
B _{10D}	10,000,000 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	1
UK declaration of conformity	1
ACMA declaration of conformity	1
Moroccan declaration of conformity	1
China RoHS	1
cULus certificate	1

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

²⁾ Distance covered by the encoder magnet while the sensor outputs a switching signal.

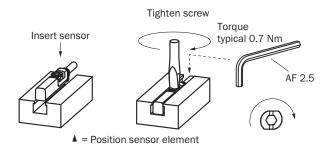
³⁾ Supply voltage U_B and constant ambient temperature Ta.

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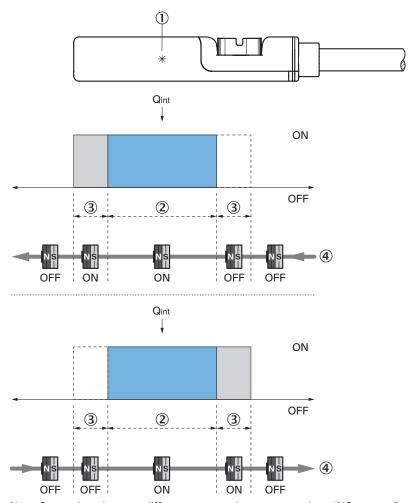
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ECLASS 8.1	27270104
ECLASS 9.0	27270104
ECLASS 10.0	27270104
ECLASS 11.0	27270104
ECLASS 12.0	27274301
ETIM 5.0	EC002544
ETIM 6.0	EC002544
ETIM 7.0	EC002544
ETIM 8.0	EC002544
UNSPSC 16.0901	39122230

Installation note



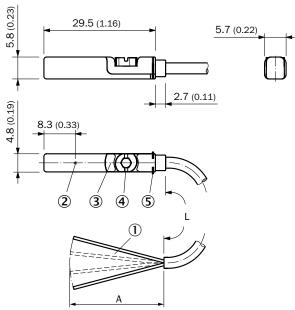
Functional principle Overrun distance



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 Position sensor element
- ③ Fixing screw SW 2.5
- ④ retaining ribs

		L	A	
1093627	RZT7-03ZUSTKUA	3 m	31.5	2
1120494	RZT7-03ZUSTKUB	5 m	31.5	2

Recommended accessories

Other models and accessories → www.sick.com/RZT7

	Brief description	Туре	part no.		
Mounting systems					
TIN	 Description: Mounting bracket on round body cylinder with piston diameter of 8 mm 130 mm, ambient temperature min -30 °C max 80 °C Material: Stainless steel, Zinc cast Details: Stainless steel, Zinc cast Packing unit: 1 piece Suitable for: T-slot 	BEF-KHZ-RT1-130	2077684		
TITO	 Description: Mounting bracket on round body cylinder with piston diameter of 8 mm 25 mm, ambient temperature min -30 °C max 80 °C Material: Stainless steel, Zinc cast Details: Stainless steel, Zinc cast Packing unit: 1 piece Suitable for: T-slot 	BEF-KHZ-RT1-25	2077682		
TITO	 Description: Mounting bracket on round body cylinder with piston diameter of 8 mm 63 mm, ambient temperature min -30 °C max 80 °C Material: Stainless steel, Zinc cast Details: Stainless steel, Zinc cast Packing unit: 1 piece Suitable for: T-slot 	BEF-KHZ-RT1-63	2077683		
0	Description: Mounting bracket on round body cylinder with piston diameter of 12 mm, ambient temperature min 0 °C max 50 °C Dimensions (W x H x L): 22.4 m Material: Plastic, Aluminum Details: Plastic, Aluminum Packing unit: 1 piece Suitable for: T-slot	BEF-KHZ-RT-12	2077681		
0	Description: Mounting bracket on round body cylinder with piston diameter of 16 mm, ambient temperature min 0 °C max 50 °C Dimensions (W x H x L): 26.6 m Material: Plastic, Aluminum Details: Plastic, Aluminum Packing unit: 1 piece Suitable for: T-slot	BEF-KHZ-RT-16	2077680		
U	Description: Mounting bracket on round body cylinder with piston diameter of 20 mm, ambient temperature min 0 °C max 50 °C Dimensions (W x H x L): 30.6 m Material: Plastic, Aluminum Details: Plastic, Aluminum Packing unit: 1 piece Suitable for: T-slot	BEF-KHZ-RT-20	2077679		
U	Description: Mounting bracket on round body cylinder with piston diameter of 25 mm, ambient temperature min 0 °C max 50 °C Dimensions (W x H x L): 35.7 m Material: Plastic, Aluminum Details: Plastic, Aluminum Packing unit: 1 piece Suitable for: T-slot	BEF-KHZ-RT-25	2077678		
U	Description: Mounting bracket on round body cylinder with piston diameter of 32 mm, ambient temperature min 0 °C max 50 °C Dimensions (W x H x L): 42.9 m Material: Plastic, Aluminum Details: Plastic, Aluminum Packing unit: 1 piece Suitable for: T-slot	BEF-KHZ-RT-32	2077677		
3	Description: Mounting bracket on round body cylinder with piston diameter of 40 mm, ambient temperature min 0 °C max 50 °C Dimensions (W x H x L): 50.9 m Material: Plastic, Aluminum Details: Plastic, Aluminum Packing unit: 1 piece	BEF-KHZ-RT-40	2077676		

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	Brief description	Туре	part no.	
	Suitable for: T-slot			
0	 Description: Mounting bracket on round body cylinder with piston diameter of 50 mm, ambient temperature min 0 °C max 50 °C Dimensions (W x H x L): 61.8 m Material: Plastic, Aluminum Details: Plastic, Aluminum Packing unit: 1 piece Suitable for: T-slot 	BEF-KHZ-RT-50	2077675	
0	 Description: Mounting bracket on round body cylinder with piston diameter of 63 mm, ambient temperature min 0 °C max 50 °C Dimensions (W x H x L): 73.9 m Material: Plastic, Aluminum Details: Plastic, Aluminum Packing unit: 1 piece Suitable for: T-slot 	BEF-KHZ-RT-63	2077674	
	 Description: Mounting bracket for integrated profile cylinder/tie-rod cylinder Material: Zinc diecast Details: Zinc diecast Items supplied: Mounting hardware included 	BEF-KHZ-PT1	2022702	
100	 Description: Mounting bracket for mounting on SMC rails ECDQ2 (T-slot) Material: Aluminum Details: Aluminum Items supplied: Without mounting hardware 	BEF-KHZ-TT1	2046439	
	 Description: Mounting bracket for mounting on SMC rails CDQ2 (T-slot) Material: Aluminum Details: Aluminum Items supplied: Without mounting hardware 	BEF-KHZ-TT2	2046440	
	 Description: Mounting bracket for cylinder with dovetail slot Material: Aluminum Details: Aluminum Items supplied: Without mounting hardware 	BEF-KHZ-ST1	2022703	
device protection and care				
M.	 Description: Protective adapter Material: Zinc diecast Items supplied: Mounting hardware included Suitable for: MZT7, RZT7, MZT8 	BEF-SG-MRZT	2077201	

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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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