RZT7-03ZWS-KWB

RZT7

SENSORS FOR T-SLOT CYLINDERS

SICK
Sensor Intelligence.

RZT7-03ZWS-KWB | RZT7
SENSORS FOR T-SLOT CYLINDERS
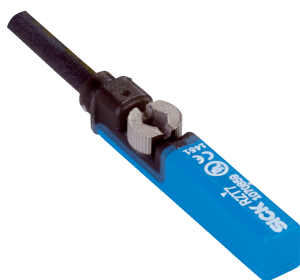
Ordering information

Type	Part no.
RZT7-03ZWS-KWB	1070872

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	32.5 mm
Switching output	Reed
Switching frequency	400 Hz
Output function	NO
Electrical wiring	AC/DC 2-wire
Enclosure rating	IP65 [1] IP67

[1] According to EN 60529.

Mechanics/electronics

Supply voltage	5 V AC/DC ... 230 V AC/DC [1]
Voltage drop	≤ 3.5 V
Continuous current I_a	≤ 100 mA [2]
Switching capacity	≤ 6 W
Protection class	II
Response sensitivity, typ.	3 mT
Overrun distance, typ.	10 mm
Reproducibility	≤ 0.1 mT [3]
Status indicator LED	✓

[1] Mains fuse F < 0.5 A IEC60127-2 sheet 1.
[2] AC.
[3] Ub and Ta constant.

Ambient operating temperature	–30 °C … +70 °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, 5 m
Connection type Detail	
Conductor cross-section	0.12 mm²
Cable diameter	Ø 2.9 mm
Bending radius	With fixed installation > 10 x cable diameter For flexible use > 15 x cable diameter
Cable outlet	Axial
Material	
Housing	Plastic
Cable	PVC

[1] Mains fuse F < 0.5 A IEC60127-2 sheet 1.

[2] AC.

[3] Ub and Ta constant.

Safety-related parameters

$MTTF_D$	23,876 years
DC_{avg}	0 %
T_M (mission time)	20 years
B_{10d}	790,000 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.
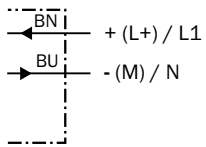
Classifications

ECI@ss 5.0	27270104
ECI@ss 5.1.4	27270104
ECI@ss 6.0	27270104
ECI@ss 6.2	27270104
ECI@ss 7.0	27270104
ECI@ss 8.0	27270104
ECI@ss 8.1	27270104
ECI@ss 9.0	27270104
ECI@ss 10.0	27270104
ECI@ss 11.0	27270104
ETIM 5.0	EC002544
ETIM 6.0	EC002544
ETIM 7.0	EC002544
ETIM 8.0	EC002544
UNSPSC 16.0901	39122230

Installation note

Recommended mech. protection device:

Insert sensor

LED

Tighten screw

Torque typical 0.7 Nm

AF 2.5

▲ = Position sensor element

Model name: BEF-SG-MRZT
Part number: 2077201
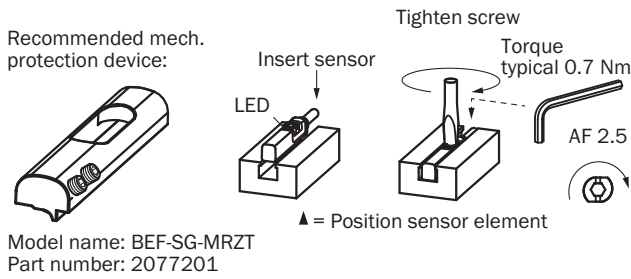
Connection diagram

Cd-037

BN   + (L+) / L1

BU   - (M) / N

Dimensional drawing (Dimensions in mm (inch))

Cable

5.8 (0.23)
3.9 (0.15)
2.2 (0.09)
0.3 (0.01)
2.7 (0.11)
4.4 (0.17)

5.7 (0.22)
4.8 (0.19)

11.2 (0.44)
4.1 (0.16)
1.2 (0.05)
0.14 (0.01)
19.8 (0.78)
32.5 (1.28)
L

A
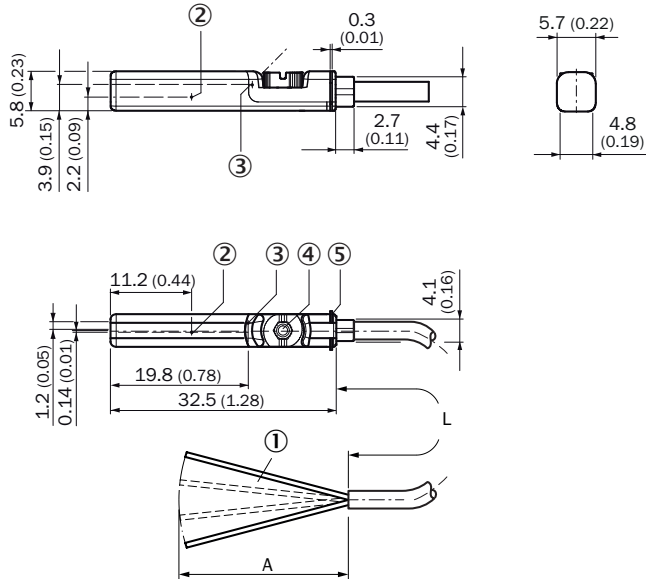
① Connection
② Position sensor element
③ Display LED
④ Fixing screw SW 2.5
⑤ Retaining ribs

Part no.	Type	L	A	Number of cores	Supply voltage
1070869	RZT7-03ZWS-KU0	2 m	31.5	2	5 V AC/DC ... 230 V AC/DC

Part no.	Type	L	A	Number of cores	Supply voltage
1070871	RZT7-03ZWS-KW0	2 m	31.5	2	5 V AC/DC ... 230 V AC/DC
1070870	RZT7-03ZWS-KUB	5 m	31.5	2	5 V AC/DC ... 230 V AC/DC
1070872	RZT7-03ZWS-KWB	5 m	31.5	2	5 V AC/DC ... 230 V AC/DC

Recommended accessories

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

	Brief description	Type	Part no.
Brackets for cylinder sensors			
	Mounting bracket for cylinder with dovetail slot, Aluminum, without mounting hardware	BEF-KHZ-ST1	2022703
	Mounting bracket for integrated profile cylinder/tie-rod cylinder, zinc diecast, mounting hardware included	BEF-KHZ-PT1	2022702
	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-RT-12	2077681
	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-RT-16	2077680
	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-RT-20	2077679
	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-RT-25	2077678
	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-RT-32	2077677
	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-RT-40	2077676
	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-RT-50	2077675
	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-RT-63	2077674
	1 piece, Mounting bracket on round body cylinder with piston diameter of 8 mm ... 130 mm, ambient temperature min –30 °C max 80 °C, stainless steel, Zinc cast	BEF-KHZ-RT1-130	2077684
	1 piece, Mounting bracket on round body cylinder with piston diameter of 8 mm ... 25 mm, ambient temperature min –30 °C max 80 °C, stainless steel, Zinc cast	BEF-KHZ-RT1-25	2077682
	1 piece, Mounting bracket on round body cylinder with piston diameter of 8 mm ... 63 mm, ambient temperature min –30 °C max 80 °C, stainless steel, Zinc cast	BEF-KHZ-RT1-63	2077683
	Mounting bracket for mounting on SMC rails CDQ2 (T-slot), Aluminum, without mounting hardware	BEF-KHZ-TT2	2046440
	Mounting bracket for mounting on SMC rails ECDQ2 (T-slot), Aluminum, without mounting hardware	BEF-KHZ-TT1	2046439

Brief description	Type	Part no.
Device protection (mechanical)		
Protective adapter, die-cast zinc, mounting hardware included	BEF-SG-MRZT	2077201

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