



MZT7-2V2NS-KU0

MZT7

CYLINDER SENSORS

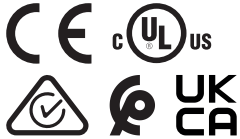
SICK
Sensor Intelligence.



Ordering information

Type	part no.
MZT7-2V2NS-KU0	1112159

Other models and accessories → www.sick.com/MZT7



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	NPN
Switching frequency	1,000 Hz
Output function	NO
Electrical wiring	DC 3-wire
Enclosure rating	IP65 ¹⁾ IP67

¹⁾ According to EN 60529.

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC
Power consumption	8 mA, without load
Voltage drop	≤ 2 V
Continuous current I_a	≤ 100 mA
Protection class	III
Response sensitivity, typ.	2.2 mT
Overrun distance, typ.	3 mm
Hysteresis, typ.	< 0.8 mT
Reproducibility	≤ 0.1 mT ¹⁾
Reverse polarity protection	Yes
Short-circuit protection	Yes

¹⁾ Supply voltage U_B and constant ambient temperature T_a.

Status indicator LED	Yes
Teach-in	No
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, 3-wire, stripped, 2 m
Connection type Detail	
Conductor cross section	0.14 mm²
Cable diameter	Ø 2.9 mm
Bending radius	With fixed installation > 3 x cable diameter
	For flexible use > 10 x cable diameter
Cable outlet	Axial
Material	
Housing	Plastic
Cable	PUR
UL File No.	NRKH.E181493 & NRKH7.E181493

¹⁾ Supply voltage U_B and constant ambient temperature T_a .

Safety-related parameters

MTTF_D	2,221 years
DC_{avg}	0 %
T_M (mission time)	20 years

Certificates

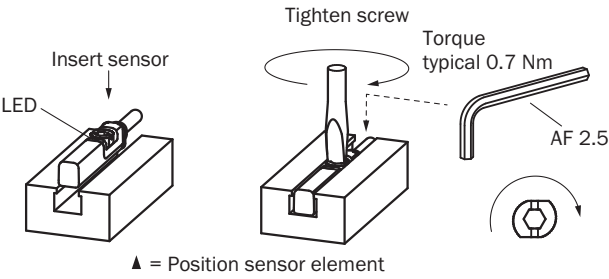
EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓
China-RoHS	✓
cULus certificate	✓

Classifications

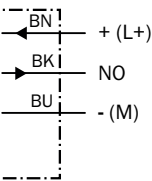
ECLASS 5.0	27270104
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ECLASS 6.0	27270104
ECLASS 6.2	27270104
ECLASS 7.0	27270104
ECLASS 8.0	27270104
ECLASS 8.1	27270104
ECLASS 9.0	27270104
ECLASS 10.0	27270104
ECLASS 11.0	27270104
ECLASS 12.0	27274301

ETIM 5.0	EC002544
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ETIM 8.0	EC002544
UNSPSC 16.0901	39122230

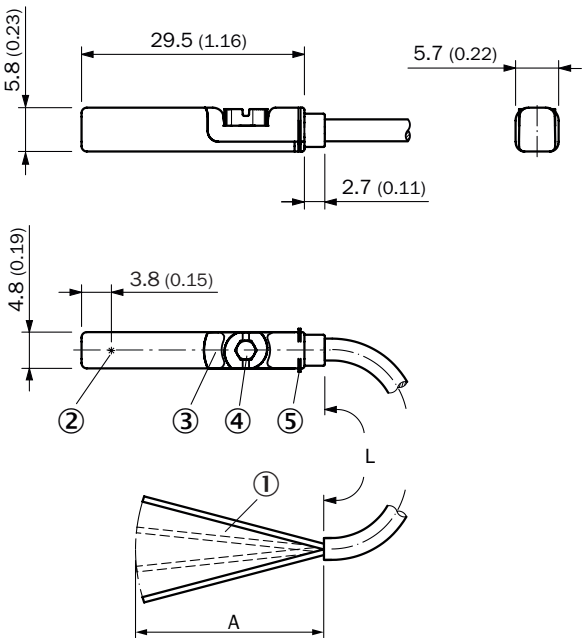
Installation note



Connection diagram Cd-001



Dimensional drawing Cable



- Dimensions in mm (inch)
- ① Connection
 - ② Position sensor element
 - ③ Display LED
 - ④ Fixing screw SW 2.5
 - ⑤ retaining ribs

		L	A	
1112160	MZT7-2V2NO-KU0	2 m	31.5	3
1112159	MZT7-2V2NS-KU0	2 m	31.5	3
1112158	MZT7-2V2PO-KU0	2 m	31.5	3
1112225	MZT7-2V2PS-KU0	2 m	31.5	3

Recommended accessories

Other models and accessories → www.sick.com/MZT7

	Brief description	Type	part no.
Mounting systems			
	• 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
	• 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
	• 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
	• 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
	• 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
	• 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
	• 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
	• 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
	• 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

	Brief description	Type	part no.
	• Suitable for: T-slot • 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 mm • Material: Plastic, Aluminum • Details: Plastic, Aluminum • Packing unit: 1 piece • Suitable for: T-slot	BEF-KHZ-RT-50	2077675
	• 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 mm • 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
	• 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			
	• Description: Protective adapter • Material: Zinc diecast • Items supplied: Mounting hardware included • Suitable for: MZT7, RZT7, MZT8	BEF-SG-MRZT	2077201

SICK AT A GLANCE

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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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