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With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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MZT7-03VNO-KP0

MZT7

SENSORS FOR T-SLOT CYLINDERS





Ordering information

Туре	Part no.
MZT7-03VN0-KP0	1070820

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	NC
Electrical wiring	DC 3-wire
Enclosure rating	IP65, IP67 ¹⁾
Cable outlet	Axial

¹⁾ According to EN 60529.

Mechanics/electronics

Supply voltage	10 V DC 30 V DC ¹⁾
Power consumption	\leq 8 mA $^{2)}$
Voltage drop	≤ 2 V
Continuous current Ia	≤ 100 mA
Protection class	III
Response sensitivity, typ.	3 mT
Overrun distance, typ.	10 mm
Hysteresis, typ.	< 0.8 mT
Reproducibility	\leq 0.1 mT $^{3)}$

 $^{^{1)}\,\}mathrm{Limit}$ values when operated in short-circuit protected network: max. 8 A.

²⁾ Without load.

³⁾ Ub and Ta constant.

Status indicator LED	✓
Reverse polarity protection	✓
Short-circuit protection	✓
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
Housing material	Plastic
Connection type	Cable with connector M8, 3-pin, 0.3 m
Cable material	PUR
Conductor cross-section	0.14 mm ²
UL File No.	NRKH.E181493 & NRKH7.E181493

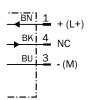
 $^{^{1)}\,\}mathrm{Limit}$ values when operated in short-circuit protected network: max. 8 A.

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
ETIM 5.0	EC002544
ETIM 6.0	EC002544
UNSPSC 16.0901	39122230

Connection diagram

cd-004



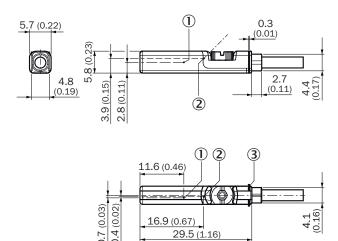
²⁾ Without load.

³⁾ Ub and Ta constant.

Functional principle



Dimensional drawing (Dimensions in mm (inch))



- ① Position sensor element
- ② Indication LED
- ③ Retaining ribs

Recommended accessories

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

	Brief description	Туре	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 $^{\circ}$ C max 50 $^{\circ}$ C, Plastic, Aluminum	BEF-KHZ-RT-25	2077678

	Brief description	Туре	Part no.
	1 piece, Mounting bracket on round body cylinder with piston diameter of 32 mm, ambient temperature min 0 $^{\circ}$ C max 50 $^{\circ}$ 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 $^{\circ}\text{C}$ max 50 $^{\circ}\text{C}$, 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 $^{\circ}\text{C}$ max 50 $^{\circ}\text{C}$, 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 $^{\circ}\text{C}$ max 50 $^{\circ}\text{C}$, 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
TID	1 piece, Mounting bracket on round body cylinder with piston diameter of 8 mm 25 mm, ambient temperature min -30°C max 80 $^\circ\text{C}$, 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
0	Mounting bracket for mounting on SMC rails ECDQ2 (T-slot), Aluminum, without mounting hardware	BEF-KHZ-TT1	2046439
evice prote	ction (mechanical)		
	Protective adapter, die-cast zinc, mounting hardware included	BEF-SG-MRZT	2077201
lug connect	ors and cables		
No.	Head A: female connector, M8, 3-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 2 m	YF8U13-020UA1XLEAX	2094782
	Head A: female connector, M8, 3-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 2 m	YF8U13-020VA1XLEAX	2095860
	Head A: female connector, M8, 3-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 3 m	YF8U13-030UA1XLEAX	2094787
	Head A: female connector, M8, 3-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 5 m	YF8U13-050UA1XLEAX	2094788
O	Head A: female connector, M8, 3-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 5 m	YF8U13-050VA1XLEAX	2095884
3	Head A: female connector, M8, 3-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 2 m	YG8U13-020UA1XLEAX	2094794
	Head A: female connector, M8, 3-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 2 m	YG8U13-020VA1XLEAX	2096165
	Head A: female connector, M8, 3-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 5 m	YG8U13-050VA1XLEAX	2096166
	Head A: female connector, M8, 3-pin, straight Head B: - Cable: unshielded	DOS-0803-G	7902077

MZT7-03VNO-KP0 | MZT7 SENSORS FOR T-SLOT CYLINDERS

Brief description	Туре	Part no.
Head A: female connector, M8, 3-pin, angled Head B: - Cable: unshielded	DOS-0803-W	7902078
Head A: male connector, M8, 3-pin, straight Head B: - Cable: unshielded	STE-0803-G	6037322

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