



# MZT8-03VPS-KUD

MZT8

SENSORS FOR T-SLOT CYLINDERS

**SICK**  
Sensor Intelligence.



## Ordering information

Type	Part no.
MZT8-03VPS-KUD	1054051

Other models and accessories → [www.sick.de/MZT8](http://www.sick.de/MZT8)



## Detailed technical data

### Features

<b>Cylinder type</b>	T-slot
<b>Cylinder types with adapter</b>	Profile cylinder Tie rod cylinder Round body cylinder Dovetail groove cylinder SMC rail CDQ2 SMC rail ECDQ2
<b>Housing length</b>	24 mm
<b>Output type</b>	PNP
<b>Switching frequency</b>	1,000 Hz
<b>Output function</b>	NO
<b>Electrical wiring</b>	DC 3-wire
<b>Enclosure rating</b>	IP 68 <sup>1)</sup> IP 69K <sup>2)</sup>

<sup>1)</sup> According to EN 60529 (IP 67 / IP 68)

<sup>2)</sup> According to DIN 40050 (IP 69K)

### Mechanics/electronics

<b>Supply voltage</b>	10 V DC ... 30 V DC
<b>Power consumption</b>	≤ 10 mA <sup>1)</sup>
<b>Voltage drop</b>	≤ 2.2 V
<b>Continuous current I<sub>a</sub></b>	≤ 200 mA
<b>Protection class</b>	III
<b>Response sensitivity, typ.</b>	2.6 mT
<b>Overrun distance, typ.</b>	3 mm
<b>Hysteresis, typ.</b>	> 0.5 mT
<b>Repeatability</b>	≤ 0.1 mT <sup>2)</sup>

<sup>1)</sup> Without load.

<sup>2)</sup> U<sub>b</sub> and T<sub>a</sub> constant.

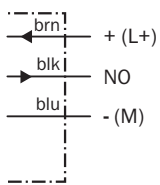
<b>Reverse polarity protection</b>	✓
<b>Short-circuit protection</b>	✓
<b>Power-up pulse protection</b>	✓
<b>Ambient operating temperature</b>	-30 °C ... +80 °C
<b>Shock and vibration resistance</b>	30 g, 11 ms / 10 ... 55 Hz, 1 mm
<b>EMC</b>	According to EN 60947-5-2
<b>Housing material</b>	Plastic, PA12
<b>Connection type</b>	Cable, 3-wire, 10 m
<b>Cable material</b>	PUR
<b>Conductor cross-section</b>	0.14 mm <sup>2</sup>
<b>UL File No.</b>	NRKH.E181493

1) Without load.

2) Ub and Ta constant.

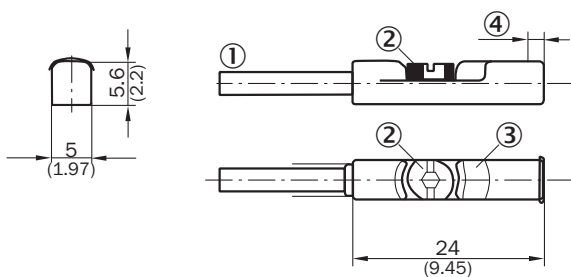
## Connection diagram

Cd-001



## Dimensional drawing (Dimensions in mm (inch))

Cable



- ① Connection
- ② Fixing screw
- ③ LED indicator
- ④ Position of sensor element; short overrun distance: 2 mm; long overrun distance: 1.7 mm

Recommended accessories

Other models and accessories → [www.sick.de/MZT8](http://www.sick.de/MZT8)

	Brief description	Type	Part no.
<b>Brackets for cylinder sensors</b>			
	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, compatible with MZT7, RZT7, MZT8, MZ2Q-T and MPS, 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, compatible with MZT7, RZT7, MZT8, MZ2Q-T and MPS, 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, compatible with MZT7, RZT7, MZT8, MZ2Q-T and MPS, 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, compatible with MZT7, RZT7, MZT8, MZ2Q-T and MPS, 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, compatible with MZT7, RZT7, MZT8, MZ2Q-T and MPS, 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, compatible with MZT7, RZT7, MZT8, MZ2Q-T and MPS, 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, compatible with MZT7, RZT7, MZT8, MZ2Q-T and MPS, plastic, Aluminum	BEF-KHZ-RT-50
1 piece, Mounting bracket on round body cylinder with piston diameter of 63 mm, ambient temperature min 0 °C max 50 °C, compatible with MZT7, RZT7, MZT8, MZ2Q-T and MPS, plastic, Aluminum		BEF-KHZ-RT-63	2077674
	1 piece, Mounting bracket on round body cylinder with diameter of 8 mm ... 130 mm, ambient temperature min -30 °C max 80 °C, compatible with MZT7, RZT7, MZT8, MZ2Q-T and MPS, Stainless steel, Zinc cast	BEF-KHZ-RT1-130	2077684
	1 piece, Mounting bracket on round body cylinder with diameter of 8 mm ... 25 mm, ambient temperature min -30 °C max 80 °C, compatible with MZT7, RZT7, MZT8, MZ2Q-T and MPS, Stainless steel, Zinc cast	BEF-KHZ-RT1-25	2077682
	1 piece, Mounting bracket on round body cylinder with diameter of 8 mm ... 63 mm, ambient temperature min -30 °C max 80 °C, compatible with MZT7, RZT7, MZT8, MZ2Q-T and MPS, 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
<b>Device protection (mechanical)</b>			
	Protective adapter, compatible with MZT7,RZT7,MZT8, 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:

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