

# MZT8-2V6PSTKWD

MZT8

**CYLINDER SENSORS** 





### Ordering information

Туре	part no.
MZT8-2V6PSTKWD	1073271

Other models and accessories → www.sick.com/MZT8







### 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	24 mm
Switching output	PNP
Switching frequency	1,000 Hz
Output function	NO
Electrical wiring	DC 3-wire
Enclosure rating	IP68 <sup>1)</sup> IP69K <sup>2)</sup>
Special features	Extended operating temperature

 $<sup>^{1)}</sup>$  According to EN 60529 (IP 67 / IP 68).

### Mechanics/electronics

Supply voltage	10 V DC 24 V DC
Power consumption	10 mA, without load
Voltage drop	≤ 2.2 V
Continuous current I <sub>a</sub>	≤ 50 mA
Protection class	III
Time delay before availability	25 ms
Response sensitivity, typ.	2.6 mT

 $<sup>^{1\!\!/}</sup>$  Distance covered by the encoder magnet while the sensor outputs a switching signal.

 $<sup>^{2)}\,\</sup>mbox{According to DIN 40050 (IP 69K)}.$ 

 $<sup>^{\</sup>rm 2)}$  Supply voltage  $\rm U_B$  and constant ambient temperature Ta.

	4)
Overrun distance, typ.	3 mm <sup>1)</sup>
Hysteresis, typ.	0.7 mT
Reproducibility	$\leq$ 0.1 mT $^{2)}$
Reverse polarity protection	Yes
Short-circuit protection	Yes
Status indicator LED	Yes
Teach-in	No
Power-up pulse protection	Yes
Ambient operating temperature	0 °C +100 °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, ferrules, 10 m
Connection type Detail	
Conductor cross section	0.14 mm <sup>2</sup>
Cable diameter	Ø 2.9 mm
Bending radius	With fixed installation > 4 x cable diameter
	For flexible use > 8 x cable diameter
Cable outlet	Axial
Material	
Housing	Plastic, PA12
Cable	PVC

 $<sup>^{1)}</sup>$  Distance covered by the encoder magnet while the sensor outputs a switching signal.

### Safety-related parameters

MTTF <sub>D</sub>	2,289 years
DC <sub>avg</sub>	0 %
T <sub>M</sub> (mission time)	20 years

### Certificates

EU declaration of conformity	✓
ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓
China RoHS	✓

### 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
ECLASS 8.1	27270104

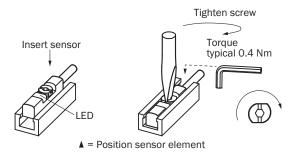
<sup>&</sup>lt;sup>2)</sup> Supply voltage U<sub>B</sub> and constant ambient temperature Ta.

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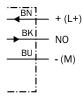
CYLINDER SENSORS

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

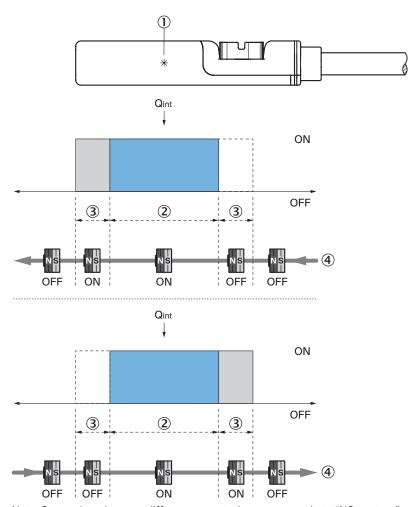
### Installation note



# Connection diagram Cd-001



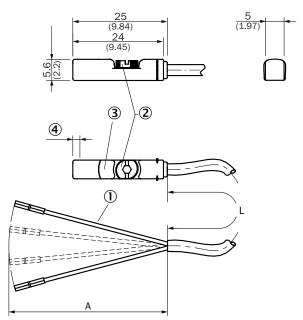
### Functional principle Overrun distance



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 Fixing screw SW 2.0
- ③ Display LED
- ④ Sensor element position; short overrun distance (3 mm): 2.25 mm, long overrun distance (9 mm): 1.5 mm

Part no.	Туре	L	A	Number of cores
1044349	MZT8-03VPS-KW0	2 m	42 mm	3
1044468	MZT8-03VNS-KW0	2 m	42 mm	3
1044469	MZT8-03VPS-KU0	2 m	42 mm	3
1044931	MZT8-03VPO-KU0	2 m	42 mm	3
1044934	MZT8-03VNS-KU0	2 m	42 mm	3
1048049	MZT8-28VPS-KU0	2 m	42 mm	3
1073269	MZT8-2V6PSTKW0	2 m	42 mm	3
1088313	MZT8-2V6NSTKW0	2 m	42 mm	3
1054237	MZT8-03VPS-KUDS08	2.5 m	42 mm	3
1044466	MZT8-03VPS-KUA	3 m	42 mm	3
1068535	MZT8-28VNS-KUA	3 m	42 mm	3
1068912	MZT8-03VNS-KUA	3 m	42 mm	3
1092766	MZT8-2V8NS-KUAS31	3 m	42 mm	3
1093836	MZT8-1V9NS-KUA	3 m	42 mm	3
1094836	MZT8-1V9NO-KUA	3 m	42 mm	3
1054238	MZT8-03VPS-KUDS09	3.6 m	42 mm	3
1044470	MZT8-03VPS-KUB	5 m	42 mm	3
1048314	MZT8-03VPS-KWB	5 m	42 mm	3
1057030	MZT8-28VPS-KWB	5 m	42 mm	3
1071438	MZT8-1V9PS-KUB	5 m	42 mm	3
1075262	MZT8-28VPS-KUB	5 m	42 mm	3
1073270	MZT8-2V6PSTKWB	5 m	42 mm	3

Part no.	Туре	L	A	Number of cores
1091033	MZT8-03VNS-KUDS28	9 m	42 mm	3
1054051	MZT8-03VPS-KUD	10 m	42 mm	3
1060429	MZT8-03VPO-KUD	10 m	42 mm	3
1073271	MZT8-2V6PSTKWD	10 m	42 mm	3

### Recommended accessories

Other models and accessories → www.sick.com/MZT8

	Brief description	Туре	part no.			
device protect	device protection and care					
M.	<ul> <li>Description: Protective adapter</li> <li>Material: Zinc diecast</li> <li>Items supplied: Mounting hardware included</li> <li>Suitable for: MZT7, RZT7, MZT8</li> </ul>	BEF-SG-MRZT	2077201			
Mounting syst	rems					
	<ul> <li>Description: Mounting bracket for integrated profile cylinder/tie-rod cylinder</li> <li>Material: Zinc diecast</li> <li>Details: Zinc diecast</li> <li>Items supplied: Mounting hardware included</li> </ul>	BEF-KHZ-PT1	2022702			
	<ul> <li>Description: Mounting bracket for cylinder with dovetail slot</li> <li>Material: Aluminum</li> <li>Details: Aluminum</li> <li>Items supplied: Without mounting hardware</li> </ul>	BEF-KHZ-ST1	2022703			
100	<ul> <li>Description: Mounting bracket for mounting on SMC rails ECDQ2 (T-slot)</li> <li>Material: Aluminum</li> <li>Details: Aluminum</li> <li>Items supplied: Without mounting hardware</li> </ul>	BEF-KHZ-TT1	2046439			
	<ul> <li>Description: Mounting bracket for mounting on SMC rails CDQ2 (T-slot)</li> <li>Material: Aluminum</li> <li>Details: Aluminum</li> <li>Items supplied: Without mounting hardware</li> </ul>	BEF-KHZ-TT2	2046440			

# 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

