AbN
automation

MZT8-03VPS-KWX

MZT8 ATEX

CYLINDER SENSORS

SICK
Sensor Intelligence.

MZT8-03VPS-KWX | MZT8 ATEX
CYLINDER SENSORS

Ordering information

Type	part no.
MZT8-03VPS-KWX	1073405

Other models and accessories ➜ www.sick.com/MZT8_ATEX

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	IP67 [1]

[1] According to EN 60529 (IP 67 / IP 68).

Mechanics/electronics

Supply voltage	10 V DC … 26 V DC [1]
Power consumption	10 mA, without load
Voltage drop	≤ 2.2 V
Continuous current I_a	≤ 50 mA [1]
Ex area category	3G, 3D
Device labeling	II 3G Ex nA IIC T4 Gc X, II 3D Ex tc IIIC T135 °C Dc X
Response sensitivity, typ.	2.8 mT

[1] Depend on ambient temperature. For details see operating instructions under „performance data of the sensor".

[2] Supply voltage U_B and constant ambient temperature Ta.

[3] PVC-cable without UL-Certificate.

Overrun distance, typ.	3 mm
Hysteresis, typ.	≤ 0.5 mT
Reproducibility	≤ 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	–20 °C ... +50 °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, 2 m
Connection type Detail	
Conductor cross section	0.14 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, PA12
Cable	PVC [3]

[1] Depend on ambient temperature. For details see operating instructions under „performance data of the sensor".

[2] Supply voltage U_B and constant ambient temperature Ta.

[3] PVC-cable without UL-Certificate.

Safety-related parameters

MTTF$_D$	2,289 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	✓

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
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

Connection diagram Cd-307

```
BN ─────────── + (L+)
BK ─────[▭]─── NO
BU ─────────── - (M)
```
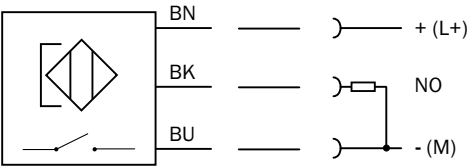
Connection diagram Cd-304

```
BN ──◄── + (L+)
BK ──►── NO
```
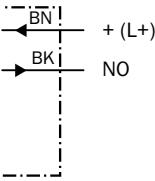
Dimensional drawing Cable
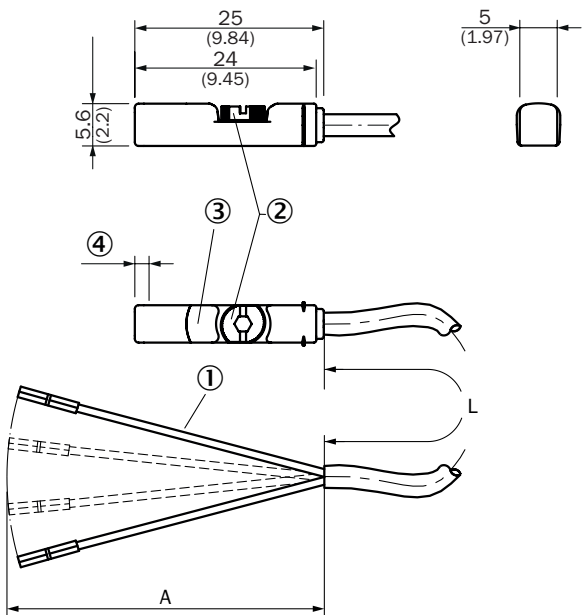
Dimensions in mm (inch)
① Connection
② Fixing screw SW 2.0
③ Display LED
④ sensor element position = short overrun distance (3 mm): 2.25 mm

Part no.	Type	L	A	Number of cores
1073405	MZT8-03VPS-KWX	2 m	42 mm	3

Recommended accessories

Other models and accessories ➜ www.sick.com/MZT8_ATEX

	Brief description	Type	part no.
Mounting systems			
	• **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 cylinder with dovetail slot • **Material:** Aluminum • **Details:** Aluminum • **Items supplied:** Without mounting hardware	BEF-KHZ-ST1	2022703
	• **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 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 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 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 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 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 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	BEF-KHZ-RT-20	2077679

Brief description	Type	part no.
• **Suitable for:** T-slot • **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 • **Suitable for:** T-slot	BEF-KHZ-RT-40	2077676
• **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 m • **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 m • **Material:** Plastic, Aluminum • **Details:** Plastic, Aluminum • **Packing unit:** 1 piece • **Suitable for:** T-slot	BEF-KHZ-RT-63	2077674
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

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."

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