MZT8-2V6PSAKUB

MZT8 VIA

CYLINDER SENSORS

SICK
Sensor Intelligence.

MZT8-2V6PSAKUB | MZT8 VIA

CYLINDER SENSORS

Ordering information

Type	part no.
MZT8-2V6PSAKUB	1073266

Other models and accessories ➜ www.sick.com/MZT8_VIA

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, IO-Link
Electrical wiring	DC 3-wire
Enclosure rating	IP68 [1] IP69K [2]
Adjustment	
IO-Link	NC or NOSwitch-on or switch-off delay (up to 1.6 seconds)
Special features	Visual installation aid/LED indicator (yellow) Power LED (green) Interior housing temperature (via IO-Link) Counter function (via IO-Link)

[1] According to EN 60529 (IP 67 / IP 68).
[2] According to DIN 40050 (IP 69K).

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC
Power consumption	10 mA, without load

[1] Supply voltage U_B and constant ambient temperature Ta.
[2] PVC-cable without UL-Certificate.

Voltage drop	≤ 2.2 V
Continuous current I_a	≤ 200 mA
Protection class	III
Response sensitivity, typ.	2.6 mT
Overrun distance, typ.	3 mm
Hysteresis, typ.	0.7 mT
Reproducibility	≤ 0.1 mT [1]
Reverse polarity protection	Yes
Short-circuit protection	Yes
Status indicator LED	Yes
Teach-in	No
Power-up pulse protection	Yes
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
Connection type	Cable, 3-wire, ferrules, drag chain use, 5 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 > 5 x cable diameter
Torsion force	± 180° / 1 m
Drag chain cycles	> 2,000,000
Drag chain parameters	Traversing speed max. 3.3 m/s at 5 m horizontal traversing length
	Acceleration max. 5 m/s²
Cable outlet	Axial
Material	
Housing	Plastic, PA12
Cable	PUR [2]
UL File No.	NRKH.E181493 & NRKH7.E181493

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

[2] PVC-cable without UL-Certificate.

Safety-related parameters

$MTTF_D$	2,289 years
DC_{avg}	0 %
T_M (mission time)	20 years

Communication interface

Communication interface	IO-Link V1.0
Communication Interface detail	COM2 (38,4 kBaud)
Cycle time	10.4 ms
Process data length	8 Bit

Process data structure	Bit 0 = switching signal Q_{L1} Bit 1 = switching signal Q_{L2} Bit 2 ... 7 = empty
VendorID	26
DeviceID HEX	0x80015D
DeviceID DEC	8388957

Certificates

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

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

Installation note

Visual installation aid
(yellow LED)

3. Tighten screw at optimum position

1. Insert sensor

Power LED (green)

2. Slide sensor

Q on
Q off

Operating range
Optimum position

LED on
LED flashes

Torque typical 0.4 Nm

Output LED (yellow)

▲ = Position sensor element
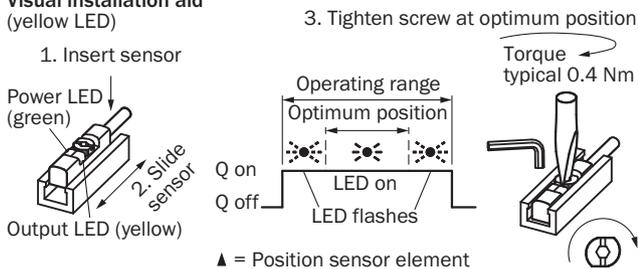
Connection diagram Cd-401

BN 1 + (L+)
BK 4 Q/C
BU 3 - (M)
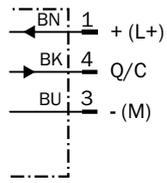
Dimensional drawing Cable
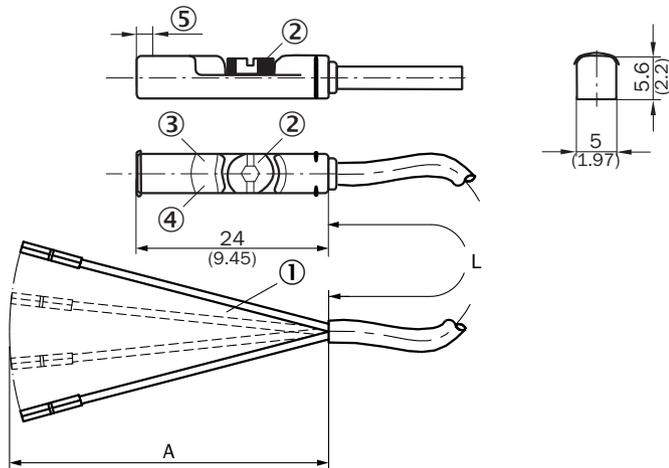
Dimensions in mm (inch)
① Connection
② Fixing screw SW 2.0
③ visual installation aid/LED indicator (yellow)
④ Power LED (green)
⑤ Sensor element position; short overrun distance (3 mm): 2.25 mm, long overrun distance (9 mm): 1.5 mm

Part no.	Type	L	A	Number of cores
1073265	MZT8-2V6PSAKU0	2 m	42 mm	3
1073266	MZT8-2V6PSAKUB	5 m	42 mm	3
1073267	MZT8-2V6PSAKUD	10 m	42 mm	3

Recommended accessories

Other models and accessories ➜ www.sick.com/MZT8_VIA

	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

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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.

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