



# MZT8-2V8PS-KRXS36

MZT8 ATEX

SENSORS FOR T-SLOT CYLINDERS

**SICK**  
Sensor Intelligence.



### Ordering information

Type	Part no.
MZT8-2V8PS-KRXS36	1109959

Other models and accessories → [www.sick.com/MZT8\\_ATEX](http://www.sick.com/MZT8_ATEX)



### 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>Switching output</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>	IP67 <sup>1)</sup>

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

#### Mechanics/electronics

<b>Supply voltage</b>	10 V DC ... 26 V DC <sup>1)</sup>
<b>Power consumption</b>	10 mA, without load
<b>Voltage drop</b>	≤ 2.2 V
<b>Continuous current I<sub>a</sub></b>	≤ 50 mA <sup>1)</sup>
<b>Ex area category</b>	3G, 3D
<b>Device labeling</b>	II 3G Ex nA IIC T4 Gc X, II 3D Ex tc IIIC T135 °C Dc X
<b>Response sensitivity, typ.</b>	2.8 mT
<b>Overrun distance, typ.</b>	9 mm

<sup>1)</sup> Depend on ambient temperature. For details see operating instructions under „performance data of the sensor“.

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

<b>Hysteresis, typ.</b>	0.7 mT
<b>Reproducibility</b>	≤ 0.1 mT <sup>2)</sup>
<b>Reverse polarity protection</b>	Yes
<b>Short-circuit protection</b>	Yes
<b>Power-up pulse protection</b>	Yes
<b>Ambient operating temperature</b>	-20 °C ... +50 °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>Connection type</b>	Cable with connector M8, 3-pin, with knurled nuts, 0.3 m
<b>Connection type Detail</b>	
Conductor cross section	0.14 mm <sup>2</sup>
Cable diameter	Ø 2.9 mm
Bending radius	With fixed installation > 3 x cable diameter For flexible use > 10 x cable diameter
Torsion force	± 270° / 10 cm
Torsion cycles	> 2,000,000
Cable outlet	Axial
<b>Material</b>	
Housing	Plastic, PA12
Cable	PUR
<b>Items supplied</b>	Safety clip
<b>UL File No.</b>	E181493

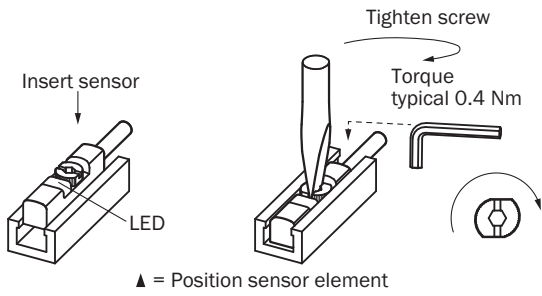
<sup>1)</sup> Depend on ambient temperature. For details see operating instructions under „performance data of the sensor“.

<sup>2)</sup> Ub and Ta constant.

## Classifications

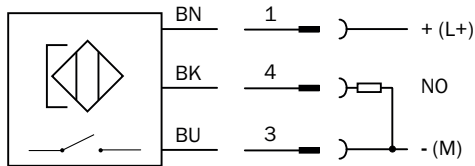
<b>eCl@ss 5.0</b>	27270104
<b>eCl@ss 5.1.4</b>	27270104
<b>eCl@ss 6.0</b>	27270104
<b>eCl@ss 6.2</b>	27270104
<b>eCl@ss 7.0</b>	27270104
<b>eCl@ss 8.0</b>	27270104
<b>eCl@ss 8.1</b>	27270104
<b>eCl@ss 9.0</b>	27270104
<b>eCl@ss 10.0</b>	27270104
<b>eCl@ss 11.0</b>	27270104
<b>eCl@ss 12.0</b>	27274301
<b>ETIM 5.0</b>	EC002544
<b>ETIM 6.0</b>	EC002544
<b>ETIM 7.0</b>	EC002544
<b>ETIM 8.0</b>	EC002544
<b>UNSPSC 16.0901</b>	39122230

### Installation note



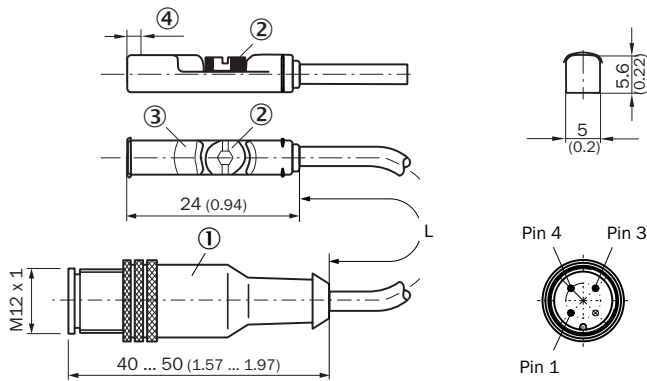
### Connection diagram

Cd-308



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

Cable with M12 male connector







- ① Connection
- ② Fixing screw SW 2.0
- ③ Display LED
- ④ Sensor element position = long overrun distance (9 mm): 1.5 mm

Part no.	Type	L	Number of cores
1109959	MZT8-2V8PS-KRXS36	300 mm	3

## Recommended accessories

 Other models and accessories → [www.sick.com/MZT8\\_ATEX](http://www.sick.com/MZT8_ATEX)

	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, 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 °C max 50 °C, 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, 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, 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, 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 °C max 50 °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
	1 piece, Mounting bracket on round body cylinder with piston diameter of 8 mm ... 25 mm, ambient temperature min -30 °C max 80 °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
	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, die-cast zinc, mounting hardware included	BEF-SG-MRZT	2077201
<b>Plug connectors and cables</b>			
	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, PVC, unshielded, 5 m	YF8U13-050VA1XLEAX	2095884

	Brief description	Type	Part no.
	Head A: female connector, M8, 3-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 2 m  Head A: female connector, M8, 3-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 5 m	YG8U13-020VA1XLEAX	2096165
	Head A: female connector, M8, 3-pin, straight Cable: unshielded	DOS-0803-G	7902077
	Head A: female connector, M8, 3-pin, angled Cable: unshielded	DOS-0803-W	7902078
	Head A: male connector, M8, 3-pin, straight Cable: unshielded	STE-0803-G	6037322

## 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](http://www.sick.com)