

# MZT8-2V8PS-KRTS33

MZT8 Twin

**CYLINDER SENSORS** 





#### Ordering information

Туре	part no.
MZT8-2V8PS-KRTS33	1095485

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



#### 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	2 x PNP
Switching frequency	1,000 Hz
Output function	2 x N/O contact
Electrical wiring	DC 4-wire
Enclosure rating	IP68 <sup>1)</sup>
Special features	Two sensor heads on one plug

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

## Mechanics/electronics

Supply voltage	10 V DC 30 V DC
Power consumption	10 mA, without load
Voltage drop	≤ 2.2 V
Continuous current I <sub>a</sub>	≤ 200 mA
Protection class	III
Time delay before availability	25 ms
Response sensitivity, typ.	2.8 mT
Overrun distance, typ.	9 mm <sup>1)</sup>
Hysteresis, typ.	> 0.5 mT
Reproducibility	$\leq$ 0.1 mT $^{2)}$
Reverse polarity protection	Yes

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

 $<sup>^{2)}\,\</sup>mbox{Supply}$  voltage  $\mbox{U}_{\mbox{\footnotesize B}}$  and constant ambient temperature Ta.

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 with plug, M8, 4-pin, with knurled screws, 0.3 m
Connection type Detail	
Conductor cross section	0.14 mm <sup>2</sup>
Cable diameter	Ø 2.9 mm
Bending radius	With fixed installation > 8 x cable diameter
	For flexible use > 12 x cable diameter
Cable outlet	Axial
Material	
Housing	Plastic, PA12
Cable	PUR
UL File No.	NRKH.E181493 & NRKH7.E181493

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

#### 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

#### Certificates

EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓

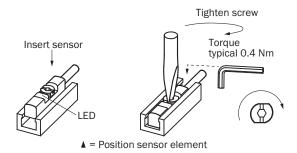
<sup>&</sup>lt;sup>2)</sup> Supply voltage U<sub>B</sub> and constant ambient temperature Ta.

# MZT8-2V8PS-KRTS33 | MZT8 Twin

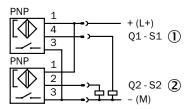
#### CYLINDER SENSORS

Moroccan declaration of conformity	✓
China RoHS	✓
cULus certificate	✓

#### Installation note

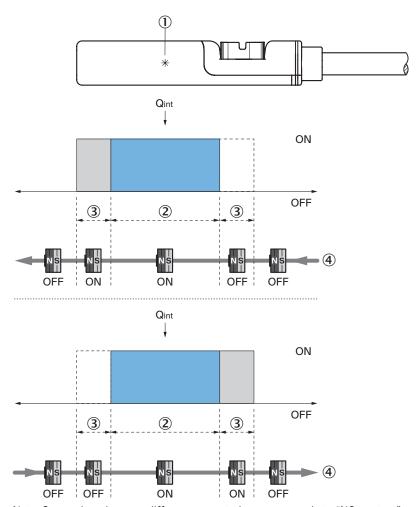


### Connection diagram Cd-398



- ① sensor head 1
- 2 sensor head 2

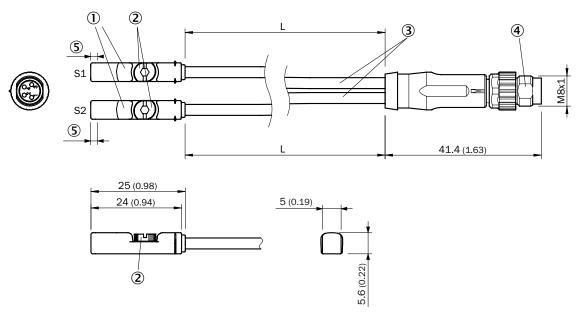
## Functional principle Overrun distance



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**



Dimensions in mm (inch)

- 1 Display LED
- ② Fixing screw SW 2.0
- 3 cable
- 4 Connection
- ⑤ Sensor element position; short overrun distance (3 mm): 2.25 mm, long overrun distance (9 mm): 1.5 mm

Part no.	Туре	L
1114713	MZT8-03VPS-KRTS37	100 mm
1095485	MZT8-2V8PS-KRTS33	300 mm
1087116	MZT8-03VPS-KRTS11	300 mm
1141434	MZT8-03VPSAKRTS42	300 mm
1087117	MZT8-03VPS-KRT	500 mm
1087118	MZT8-03VPS-KRTS12	750 mm

#### Recommended accessories

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

	Brief description	Туре	part no.
connectors ar	nd cables		
	<ul> <li>Connection type head A: Female connector, M8, 4-pin, straight, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 5 m, 4-wire, PUR, halogen-free</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation</li> </ul>	YF8U14-050UA3XLEAX	2094792
	<ul> <li>Connection type head A: Male connector, M8, 4-pin, straight, A-coded</li> <li>Description: Unshielded</li> <li>Connection systems: Screw-type terminals</li> <li>Permitted cross-section: 0.14 mm² 0.5 mm²</li> </ul>	STE-0804-G	6037323

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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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