



MZT8-03VPSAKRTS42

MZT8 Twin

CYLINDER SENSORS

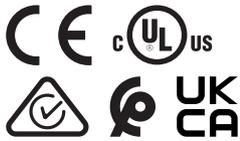
SICK
Sensor Intelligence.



Ordering information

Type	part no.
MZT8-03VPSAKRTS42	1141434

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 ¹⁾
Special features	Two sensor heads on one plug Visual installation aid/LED indicator (yellow) Power LED (green)

¹⁾ 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_a	≤ 200 mA
Protection class	III
Time delay before availability	25 ms
Response sensitivity, typ.	2.6 mT
Overrun distance, typ.	3 mm ¹⁾
Hysteresis, typ.	≤ 0.5 mT
Reproducibility	≤ 0.1 mT ²⁾

¹⁾ Distance covered by the encoder magnet while the sensor outputs a switching signal.

²⁾ Supply voltage U_B and constant ambient temperature T_a.

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 with plug, M8, 4-pin, with knurled screws, 0.3 m
Connection type Detail	
Conductor cross section	0.14 mm ²
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

1) Distance covered by the encoder magnet while the sensor outputs a switching signal.

2) Supply voltage U_B and constant ambient temperature T_a .

Certificates

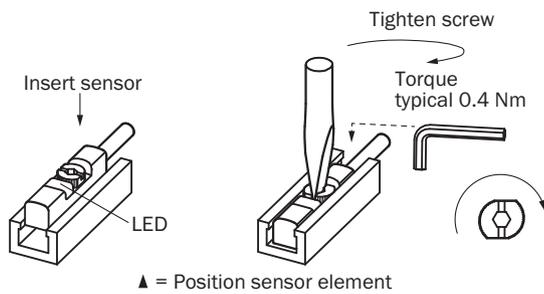
EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓
China RoHS	✓
cULus certificate	✓

Classifications

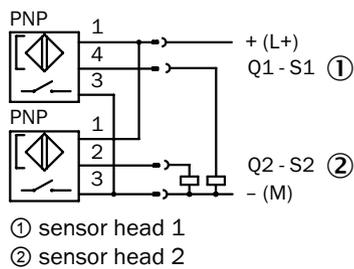
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ECLASS 9.0	27270104
ECLASS 10.0	27270104
ECLASS 11.0	27270104
ECLASS 12.0	27274301
ETIM 5.0	EC002544

ETIM 6.0	EC002544
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ETIM 8.0	EC002544
UNSPSC 16.0901	39122230

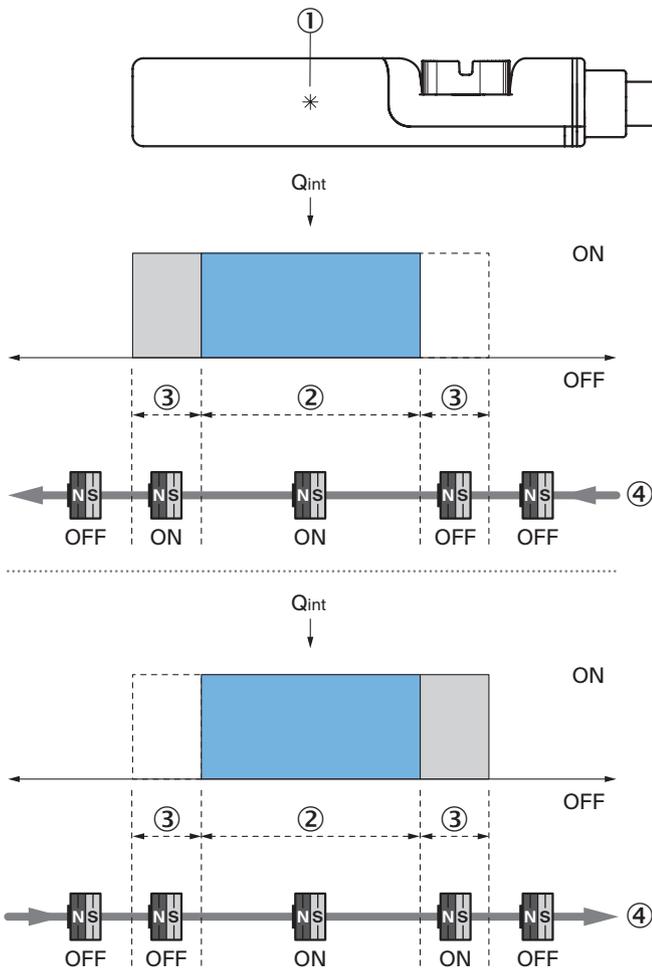
Installation note



Connection diagram Cd-398



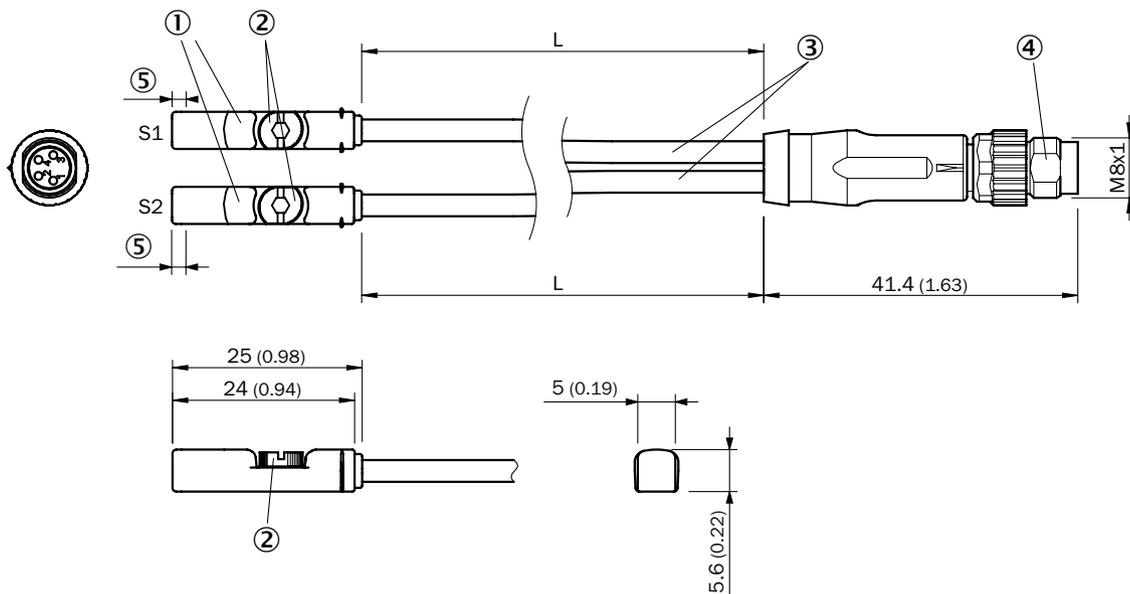
Functional principle Overrun distance



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.	Type	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	Type	part no.
connectors and cables		
 <ul style="list-style-type: none"> • Description: Sensor/actuator cable, unshielded • Connection type head A: Female connector, M8, 4-pin, straight, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 5 m, 4-wire, PUR, halogen-free • Application: Drag chain operation, Zones with oils and lubricants, Robot, Drag chain operation 	YF8U14-050UA3XLEAX	2094792
 <ul style="list-style-type: none"> • Description: Unshielded • Connection type head A: Male connector, M8, 4-pin, straight, A-coded • Connection systems: Screw-type terminals • Permitted cross-section: 0.14 mm² ... 0.5 mm² 	STE-0804-G	6037323

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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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