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DATA SHEET

MZT8-2V8PSWKQT

MZT8 Twin
Cylinder sensors

SICK Sensor Intelligence

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CYLINDER SENSORS

MZT8-2V8PSWKQT

ORDERING INFORMATION

Type	part no.
MZT8-2V8PSWKQT	1115383

Further device versions and accessories at 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	< 10 Hz
Output function	2 x N/O contact
Electrical wiring	DC 4-wire
Enclosure rating	IP68 [1]
Special features	Magnetic field and welding field resistance (interference fields) PTFE hose

[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.	2.8 mT

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

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

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Overrun distance, typ.	9 mm [1]
Hysteresis, typ.	0.7 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	–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, M12, 4-pin, with PTFE hose, 0.5 m
Connection type Detail	
Conductor cross section	0.14 mm²
Cable diameter	Ø 2.9 mm
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 Ta.

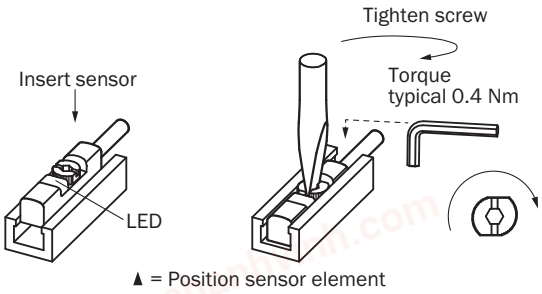
SAFETY-RELATED PARAMETERS

$MTTF_D$	1,144 years
DC_{avg}	0 %
T_M (mission time)	20 years

CERTIFICATES

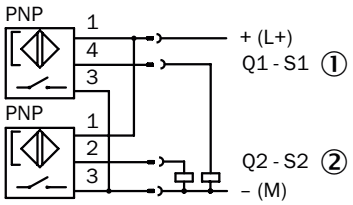
EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓
China RoHS	✓
China Compulsory Product Certification (CCC) exempt	✓
cULus certificate	✓

INSTALLATION NOTE



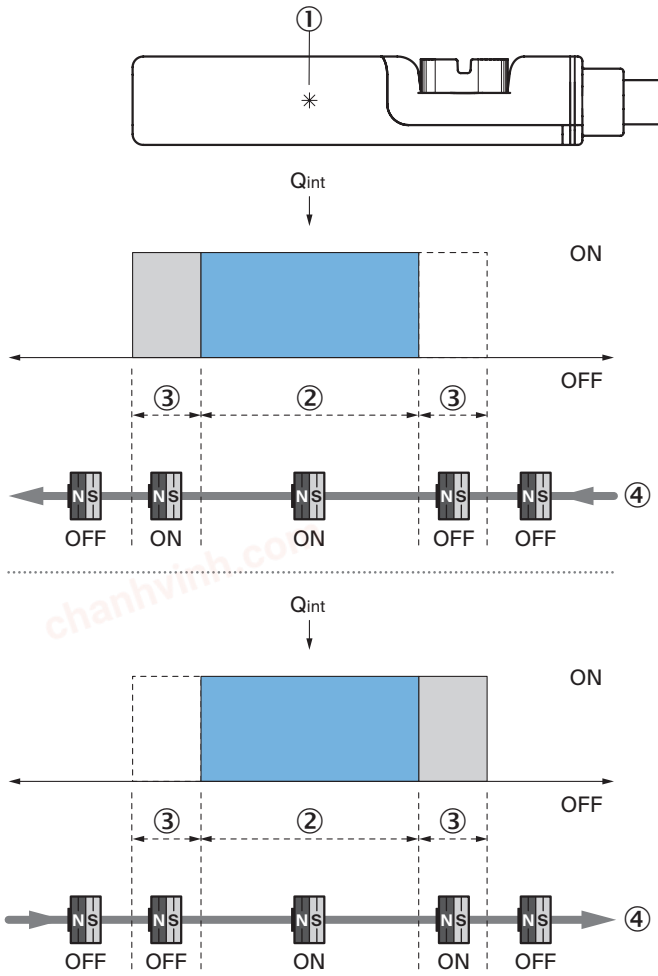
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CONNECTION DIAGRAM CD-398



① sensor head 1
② sensor head 2

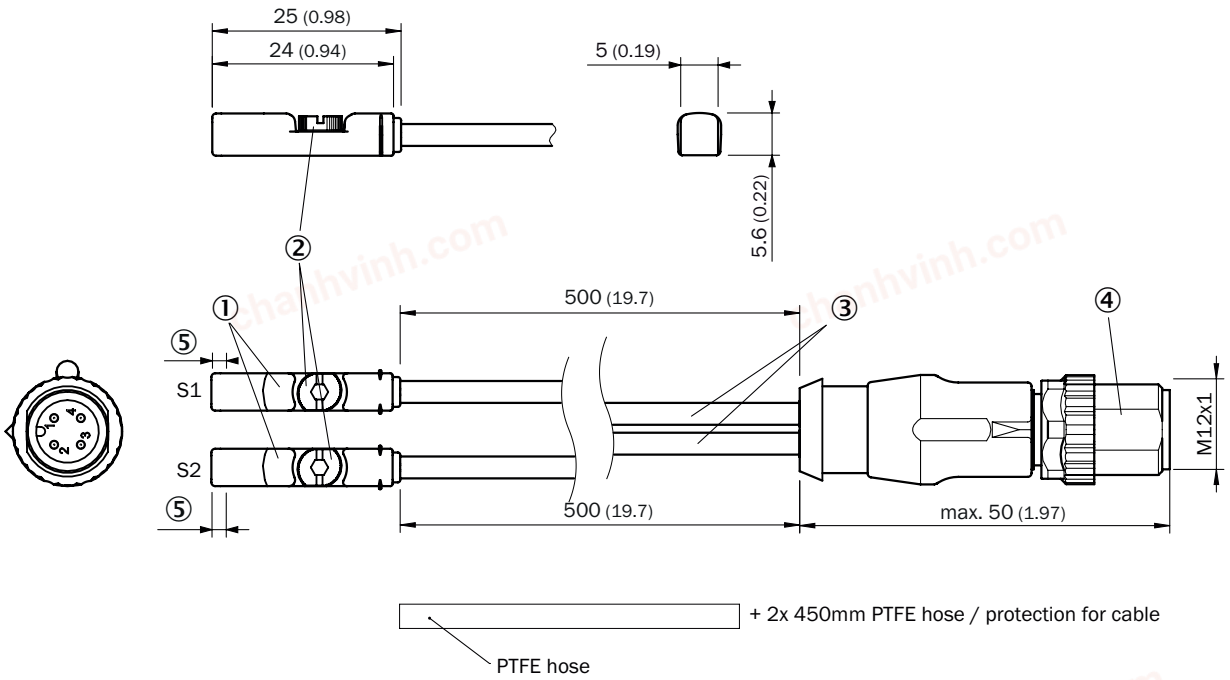
FUNCTIONAL PRINCIPLE OVERRUN DISTANCE



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

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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

Further information as well as suitable accessories, example applications and downloads such as CAD dimensional models, operating instructions and software can be found at www.sick.com/1115383

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SICK AT A GLANCE

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SICK combines sensor intelligence with industry expertise and certified consulting services. We provide the ideal foundation for scalable as well as tailor-made automation solutions and create added value along the entire value chain. Our close partnerships with our customers are more than just a promise: Together, we optimize productivity, improve quality, protect health and safety, and help build a sustainable future. All with empathy and trust.

Since 1946, we have been developing innovative technologies with passion and a pioneering spirit. With a global network in around 40 countries, SICK has a global presence and is always close by. The company's headquarters are located in Waldkirch near Freiburg, Germany. Our customers benefit from our understanding of both local and global requirements, which enables us to deliver tailor-made solutions

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