



MZT8-2V8PSWKQT

MZT8 Twin

CYLINDER SENSORS

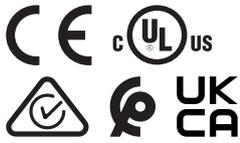
SICK
Sensor Intelligence.



Ordering information

| Type | part no. |
|----------------|----------|
| MZT8-2V8PSWKQT | 1115383 |

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 | < 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 |
| Overrun distance, typ. | 9 mm ¹⁾ |
| Hysteresis, typ. | 0.7 mT |
| Reproducibility | ≤ 0.1 mT ²⁾ |
| Reverse polarity protection | Yes |

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.

| | |
|---------------------------------------|---|
| 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 male connector, M12, 4-pin, with knurled screws, with PTFE hose, 0.5 m |
| Connection type Detail | |
| Conductor cross section | 0.14 mm ² |
| 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 T_a .

Safety-related parameters

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

Classifications

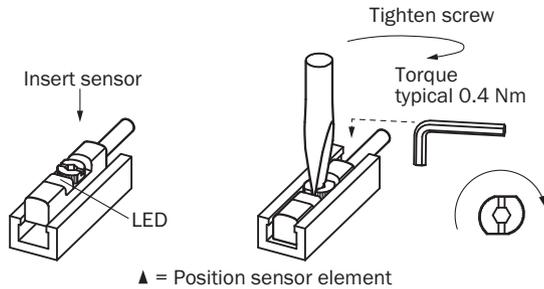
| | |
|-----------------------|----------|
| ECLASS 5.0 | 27270104 |
| ECLASS 5.1.4 | 27270104 |
| ECLASS 6.0 | 27270104 |
| ECLASS 6.2 | 27270104 |
| ECLASS 7.0 | 27270104 |
| ECLASS 8.0 | 27270104 |
| ECLASS 8.1 | 27270104 |
| ECLASS 9.0 | 27270104 |
| ECLASS 10.0 | 27270104 |
| ECLASS 11.0 | 27270104 |
| 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

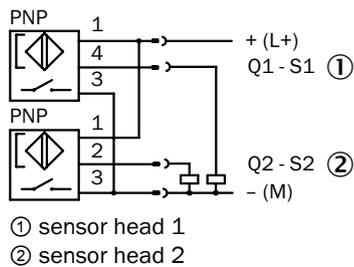
| | |
|-------------------------------------|---|
| EU declaration of conformity | ✓ |
|-------------------------------------|---|

| | |
|---|---|
| UK declaration of conformity | ✓ |
| ACMA declaration of conformity | ✓ |
| Moroccan declaration of conformity | ✓ |
| China RoHS | ✓ |
| cULus certificate | ✓ |

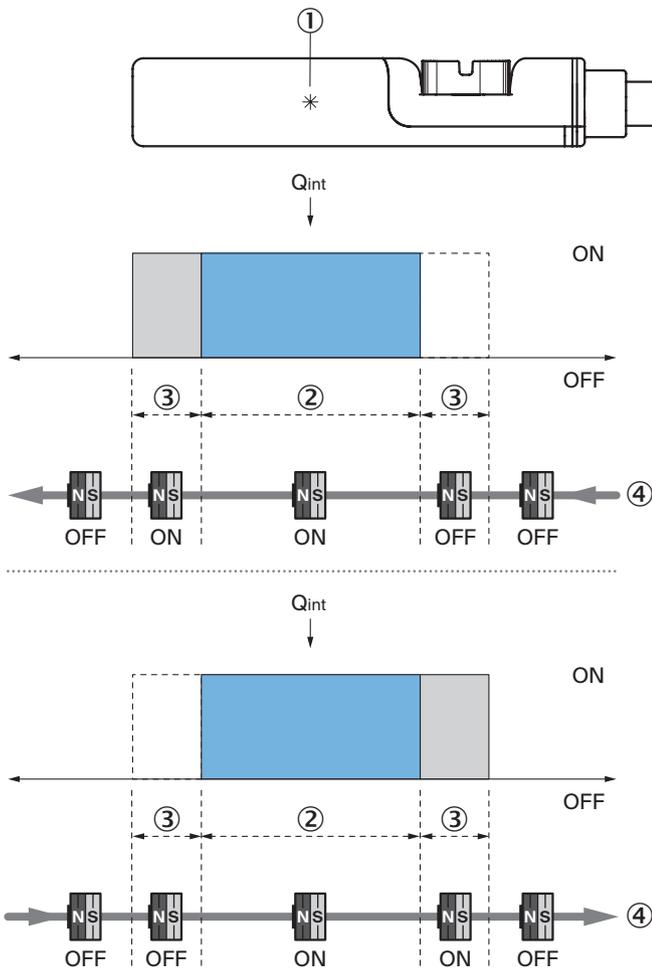
Installation note



Connection diagram Cd-398



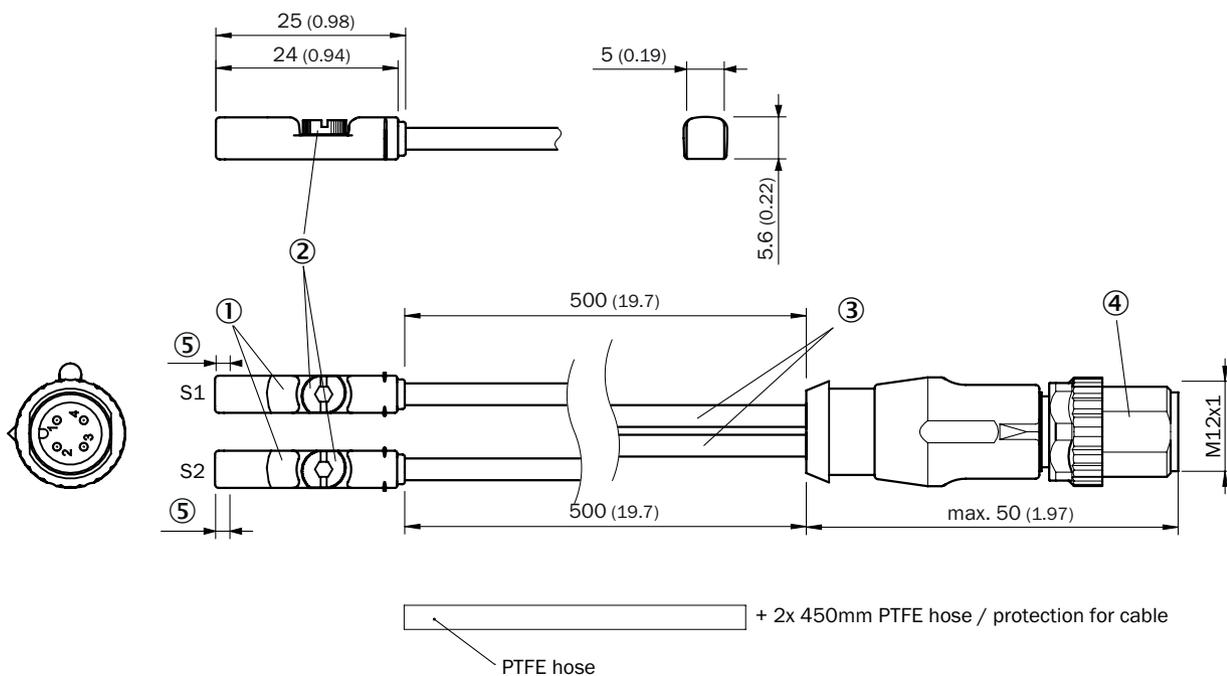
Functional principle Overrun distance



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

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"> • Connection type head A: Female connector, M12, 4-pin, straight, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 5 m, 4-wire, PUR, halogen-free • Description: Sensor/actuator cable, unshielded • Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation | YF2A14-050UB3XLEAX | 2095608 |
|  | <ul style="list-style-type: none"> • Connection type head A: Male connector, M12, 4-pin, straight, A-coded • Description: Unshielded • Connection systems: Screw-type terminals • Permitted cross-section: ≤ 0.75 mm² | STE-1204-G | 6009932 |

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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.

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