



MZT8

Cylinder sensors with precise switching point for T-slot cylinders

SICK
Sensor Intelligence.



Technical data overview

| | |
|------------------------------------|---|
| Output function | NO / NC (depends on variant) |
| Teach-in | No |
| Special features | 20 ms pulse stretching (off delay) Magnetic field and welding field resistance (interference fields) PTFE hose Stainless steel connector Increased weld field immunity with 600 ms interference suppression time Extended operating temperature (depends on variant) |
| 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 |

Product description

The MZT8 cylinder sensor from SICK is the flexible solution for detecting the piston position in pneumatic actuators. The sensor can be inserted into cylinders very easily and, with the screw-and-washer assembly, tightened with just a quarter turn of a slotted screwdriver or hex key. It is not only the perfect fit in the slot that makes the MZT8 ideal for use in pneumatic cylinders with T-slots. Patented GMR technology and the SICK ASIC ensure that the sensor only needs one attempt to deliver precise switching. Multiple switching operations are suppressed, which results in increased machine performance. The MZT8 is available in a range of variants up to an enclosure rating of IP 69K and with a temperature resistance of up to 100 °C. This ensures the sensor has a long service life and reduces maintenance costs.

At a glance

- Can be used in all standard cylinders, linear slides, and grippers using the T-slot and – with the help of adapters – in round rod, tie-rod, and profile cylinders, and cylinders with a dovetail groove
- Insertion of the sensor into the slot from above makes mounting quick and easy
- Combined fixing screw (hexagon socket screw and slotted screw)
- High-temperature variants: temperature-resistant up to 100 °C
- Very short sensor housing for use in short stroke cylinders
- Enclosure ratings: IP 67, IP 68, IP 69K

Your benefits

- Can be used at temperatures up to 100 °C
- Very rugged housing with enclosure rating IP 67, IP 68, or IP 69K extends the service life of the sensor
- Increases machine output through precise switching at the first attempt
- Quick and easy mounting using an Allen key or flat-head screwdriver
- Saves time on initial installation and when replacing devices as the sensor can be easily inserted into the slot from above. The end caps of the cylinder do not have to be removed.
- Low maintenance costs as the sensor is resistant to shock and vibration, meaning it does not slide about in the slot

Fields of application

- End position detection in pneumatic cylinders

Ordering information

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

- **Electrical wiring:** DC 3-wire
- **Communication interface:** -

| Connection type | Output function | Type | Part no. |
|---|-----------------|-------------------|----------|
| Cable with M12 male connector, 4-pin, 0.3 m | NO | MZT8-1V9PS-KQ0S34 | 1101002 |
| Cable with MOLEX-connector, 3-pin, 0.16 m | NO | MZT8-03VNS-KUDS29 | 1092473 |
| Cable with MOLEX-connector, 3-pin, 0.36 m | NO | MZT8-03VNS-KUDS30 | 1092474 |
| Cable with connector M12, 4-pin, with knurled nut, 0.3 m | NO | MZT8-03VPS-KQ0 | 1044460 |
| | | MZT8-28VPS-KQ0 | 1048051 |
| | | MZT8-2V8PSWKQ0S40 | 1135895 |
| Cable with connector M12, 4-pin, with knurled nut, 0.5 m | NO | MZT8-28VPS-KQD | 1058311 |
| Cable with connector M12, 4-pin, with knurled nut, 1 m | NO | MZT8-03VPS-KQD | 1058317 |
| Cable with connector M8, 3-pin, 0.12 m | NO | MZT8-03VPS-KPDS38 | 1121966 |
| Cable with connector M8, 3-pin, 0.1 m | NO | MZT8-2V8PS-KPDS26 | 1089849 |
| Cable with connector M8, 3-pin, 0.3 m | NC | MZT8-03VPO-KP0 | 1044930 |
| | NO | MZT8-03VNS-KP0 | 1044932 |
| | | MZT8-03VPS-KP0 | 1044458 |
| | | MZT8-03VPS-KPOS06 | 1053415 |
| | | MZT8-19VPS-KP0 | 1053014 |
| | | MZT8-28VPS-KP0 | 1048048 |
| | | MZT8-28VPS-KPOS10 | 1054250 |
| | | MZT8-2V6PSTKPO | 1073268 |
| Cable with connector M8, 3-pin, 0.75 m | NO | MZT8-03VPS-KPD | 1044461 |
| Cable with male connector, M12, 4-pin, with knurled screws, with PTFE hose, 0.5 m | NO | MZT8-2V8PSWKQDS39 | 1127307 |
| Cable with male connector, M8, 3-pin, with knurled screws, with PTFE hose, 0.5 m | NO | MZT8-2V8PSWKRO | 1109451 |
| Cable with plug M8, 3-pin, with knurled nut, 0.3 m | NO | MZT8-03VPS-KRD | 1044464 |
| | | MZT8-03VPS-KRDS04 | 1048502 |
| | | MZT8-03VPS-KRDS12 | 1067400 |
| Cable with plug M8, 3-pin, with knurled nut, 0.5 m | NC | MZT8-03VNO-KRDS16 | 1069395 |
| | NO | MZT8-03VPO-KRDS14 | 1069393 |
| | | MZT8-03VNS-KR0 | 1044935 |
| | | MZT8-03VNS-KRDS15 | 1069394 |
| | | MZT8-03VPS-KR0 | 1044459 |
| | | MZT8-03VPS-KROS01 | 1046374 |
| | | MZT8-03VPS-KROS05 | 1048503 |
| | | MZT8-03VPS-KRDS13 | 1069392 |
| | | MZT8-28VPS-KR0 | 1048050 |
| | | MZT8-28VPS-KROS02 | 1048174 |

| Connection type | Output function | Type | Part no. |
|--|-----------------|-------------------|----------|
| Cable with plug M8, 3-pin, with knurled nut, 1.5 m | NO | MZT8-03VPS-KRDS46 | 1144310 |
| Cable with plug M8, 3-pin, with knurled nut, 2 m | NO | MZT8-03VPS-KRDS35 | 1106079 |
| Cable with plug M8, 3-pin, with knurled nut, 5 m | NO | MZT8-03VPS-KRB | 1044463 |
| Cable, 3-wire, ferrules, 10 m | NC | MZT8-03VPO-KUD | 1060429 |
| | NO | MZT8-03VPS-KUD | 1054051 |
| | | MZT8-2V6PSTKWD | 1073271 |
| Cable, 3-wire, ferrules, 2.5 m | NO | MZT8-03VPS-KUDS08 | 1054237 |
| Cable, 3-wire, ferrules, 2 m | NC | MZT8-03VPO-KU0 | 1044931 |
| | NO | MZT8-03VNS-KU0 | 1044934 |
| | | MZT8-03VNS-KWO | 1044468 |
| | | MZT8-03VPS-KU0 | 1044469 |
| | | MZT8-03VPS-KWO | 1044349 |
| | | MZT8-28VPS-KU0 | 1048049 |
| | | MZT8-2V6NSTKWO | 1088313 |
| | | MZT8-2V6PSTKWO | 1073269 |
| Cable, 3-wire, ferrules, 3.6 m | NO | MZT8-03VPS-KUDS09 | 1054238 |
| Cable, 3-wire, ferrules, 3 m | NC | MZT8-1V9NO-KUA | 1094836 |
| | NO | MZT8-03VNS-KUA | 1068912 |
| | | MZT8-03VPS-KUA | 1044466 |
| | | MZT8-1V9NS-KUA | 1093836 |
| | | MZT8-28VNS-KUA | 1068535 |
| | | MZT8-2V8NS-KUAS31 | 1092766 |
| Cable, 3-wire, ferrules, 5 m | NO | MZT8-03VPS-KUB | 1044470 |
| | | MZT8-03VPS-KWB | 1048314 |
| | | MZT8-1V9PS-KUB | 1071438 |
| | | MZT8-28VPS-KUB | 1075262 |
| | | MZT8-28VPS-KWB | 1057030 |
| | | MZT8-2V6PSTKWB | 1073270 |
| Cable, 3-wire, ferrules, 9 m | NO | MZT8-03VNS-KUDS28 | 1091033 |

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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."

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