



MZT8

Cylinder sensors with precise switching point for T-slot cylinders

SICK
Sensor Intelligence.



Technical data overview

Output function	NO / NC (depending on type)
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 (depending on type)
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	Switching output	Output function	Type	Part no.
Cable with M12 male connector, 4-pin, 0.3 m	PNP	NO	MZT8-1V9PS-KQ0S34	1101002

Connection type	Switching output	Output function	Type	Part no.
Cable with MOLEX-connector, 3-pin, 0.16 m	NPN	NO	MZT8-03VNS-KUDS29	1092473
Cable with MOLEX-connector, 3-pin, 0.36 m	NPN	NO	MZT8-03VNS-KUDS30	1092474
Cable with connector M12, 4-pin, with knurled nuts, 0.3 m	PNP	NO	MZT8-03VPS-KQ0	1044460
			MZT8-28VPS-KQ0	1048051
			MZT8-2V8PSWKQ0S40	1135895
Cable with connector M12, 4-pin, with knurled nuts, 0.5 m	PNP	NO	MZT8-28VPS-KQD	1058311
Cable with connector M12, 4-pin, with knurled nuts, 1 m	PNP	NO	MZT8-03VPS-KQD	1058317
Cable with connector M8, 3-pin, 0.12 m	PNP	NO	MZT8-03VPS-KPDS38	1121966
Cable with connector M8, 3-pin, 0.3 m	NPN	NO	MZT8-03VNS-KP0	1044932
		NC	MZT8-03VPO-KP0	1044930
	PNP	NO	MZT8-03VPS-KP0	1044458
		MZT8-03VPS-KPOS06	1053415	
		MZT8-19VPS-KP0	1053014	
		MZT8-28VPS-KP0	1048048	
		MZT8-28VPS-KPOS10	1054250	
		MZT8-2V6PSTKP0	1073268	
Cable with connector M8, 3-pin, 0.75 m	PNP	NO	MZT8-03VPS-KPD	1044461
Cable with connector M8, 3-pin, with knurled nuts, 0.3 m	PNP	NO	MZT8-03VPS-KRD	1044464
			MZT8-03VPS-KRDS04	1048502
			MZT8-03VPS-KRDS12	1067400
Cable with connector M8, 3-pin, with knurled nuts, 0.5 m	NPN	NC	MZT8-03VNO-KRDS16	1069395
		NO	MZT8-03VNS-KR0	1044935
		MZT8-03VNS-KRDS15	1069394	
	PNP	NC	MZT8-03VPO-KRDS14	1069393
		NO	MZT8-03VPS-KR0	1044459
		MZT8-03VPS-KROS01	1046374	
		MZT8-03VPS-KROS05	1048503	
		MZT8-03VPS-KRDS13	1069392	
		MZT8-28VPS-KR0	1048050	
		MZT8-28VPS-KROS02	1048174	
Cable with connector M8, 3-pin, with knurled nuts, 1.5 m	PNP	NO	MZT8-03VPS-KRDS46	1144310
Cable with connector M8, 3-pin, with knurled nuts, 2 m	PNP	NO	MZT8-03VPS-KRDS35	1106079
Cable with connector M8, 3-pin, with knurled nuts, 5 m	PNP	NO	MZT8-03VPS-KRB	1044463
Cable with male connector, M12, 4-pin, with knurled screws, with PTFE hose, 0.5 m	PNP	NO	MZT8-2V8PSWKQDS39	1127307

Connection type	Switching output	Output function	Type	Part no.	
Cable with male connector, M8, 3-pin, with knurled screws, with PTFE hose, 0.5 m	PNP	NO	MZT8-2V8PSWKRO	1109451	
Cable, 3-wire, 10 m	PNP	NC	MZT8-03VPO-KUD	1060429	
		NO	MZT8-03VPS-KUD	1054051	
			MZT8-2V6PSTKWD	1073271	
Cable, 3-wire, 2.5 m	PNP	NO	MZT8-03VPS-KUDS08	1054237	
Cable, 3-wire, 2 m	NPN	NO	MZT8-03VNS-KU0	1044934	
			MZT8-03VNS-KW0	1044468	
			MZT8-2V6NSTKW0	1088313	
	PNP	NC	MZT8-03VPO-KU0	1044931	
		NO	MZT8-03VPS-KU0	1044469	
			MZT8-03VPS-KW0	1044349	
			MZT8-28VPS-KU0	1048049	
			MZT8-2V6PSTKW0	1073269	
	Cable, 3-wire, 3.6 m	PNP	NO	MZT8-03VPS-KUDS09	1054238
	Cable, 3-wire, 3 m	NPN	NC	MZT8-1V9NO-KUA	1094836
NO			MZT8-03VNS-KUA	1068912	
			MZT8-1V9NS-KUA	1093836	
			MZT8-28VNS-KUA	1068535	
			MZT8-2V8NS-KUAS31	1092766	
PNP		NO	MZT8-03VPS-KUA	1044466	
Cable, 3-wire, 5 m		PNP	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, 9 m	NPN	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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