



MZCS

Very short cylinder sensors for economical use in C-slot cylinders

SICK
Sensor Intelligence.

Advantages



Cost-effective and reliable position detection for pneumatic cylinders

The compact cylinder sensor MZCS for the precise detection of the position of pistons in pneumatic cylinders, e.g., in pneumatic actuators, is characterized by its reliability and cost efficiency. The rugged housing ensures precise switching operations even under demanding operating conditions. The compact design is also particularly suitable for price-sensitive automation and industrial applications.



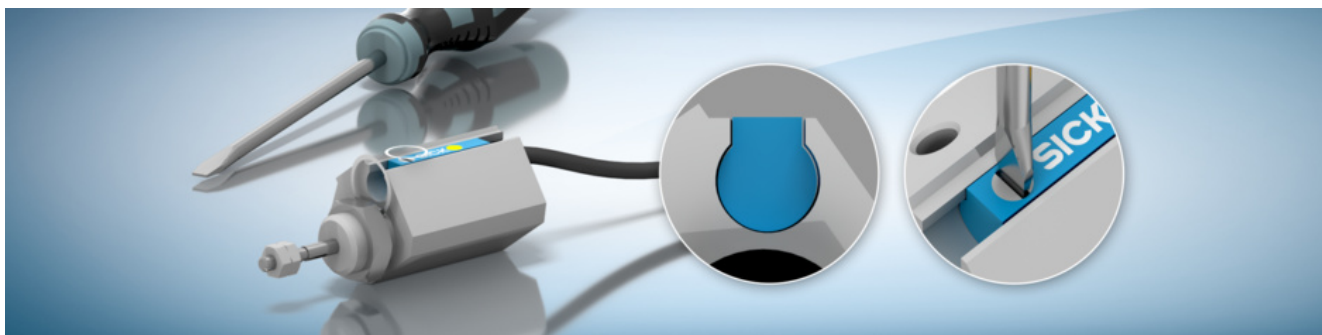
LED for displaying the output state



For common C-slots from SMC, Schunk, PHD and Bimba



The rugged and economical MZCS cylinder sensor offers precise position detection in demanding automation and industrial applications.



Compact design, easy mounting

With its very compact dimensions, the MZCS can be easily integrated into confined installation cavities. Despite its small size, the sensor offers reliable performance and a long service life – even in demanding environments. With an axial cable connection and a housing only 15 mm long, the sensor can be completely recessed in the slot – for comprehensive functionality with a compact design and low weight. Thanks to plug and play installation, commissioning is quick and easy thereby reducing downtimes and increasing the overall efficiency.



Safe and easy mounting in C-slots thanks to the slide-in concept



Compact design (15 mm) for confined installation space and high efficiency



With its compact design, the MZCS can be easily integrated into confined installation cavities while offering comprehensive functionality.



Technical data overview

Output function	NO
Teach-in	No
Cylinder types with adapter	SMC rail CDQ2 SMC rail ECDQ2 Round body cylinder Profile cylinders and tie-rod cylinders
Housing length	15 mm

Product description

The MZCS magnetic cylinder sensor is an economical solution for precise end position detection on pneumatic cylinders. Two variants are available: the PNP/NPN and the DC 2-conductor version. Setup is particularly easy thanks to plug and play, so the sensor is ready to use in no time. The compact housing is ideal for C-slots, e.g., in SMC actuators. With a length of just 15 mm, the MZCS is one of the shortest sensors on the market and can therefore be used for position detection in compact actuators. Its sturdy design enables reliable operation even in demanding environments. It is a good choice for applications in the automotive industry, machine builders, the materials industry, and the consumer goods and electronics sectors.

At a glance

- Very short housing (15 mm) for use in miniature cylinders and actuators
- For common C-slots from SMC, Schunk, PHD and Bimba
- Slide-in mounting
- Short, precise switching point – ideal for applications with short strokes
- LED for displaying the output state
- Enclosure rating IP67
- PNP/NPN and DC 2-wire versions available

Your benefits

- Short housing for limited installation space and higher system efficiency
- Suitable design for common C-slots
- Secure mounting in C-slots thanks to the slide-in concept
- Quick and easy mounting with a slotted screwdriver
- Low maintenance costs due to shock and vibration resistance – no slipping in the slot
- Rugged housing

Fields of application

- Automotive industry: positioning of car parts for final assembly
- Machine builder and materials industry: precise detection of gripping module end positions
- Handling and assembly: Accurate detection of the piston position of clamping cylinders
- Electronics industry: Precise positioning of test and assembly parts at workstations

Ordering information

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

• **Communication interface:** -

Connection type	Output function	Electrical wiring	Type	Part no.
Cable with connector M12, 3-pin, 0.5 m	NO	DC 3-wire	MZCS-1Z8NS-KQ0	1142929
			MZCS-1Z8PS-KQ0	1142925
Cable with plug M8, 3-pin, with knurled nut, 0.5 m	NO	DC 2-wire	MZCS-1Z8DS-KR0	1142932
		DC 3-wire	MZCS-1Z8NS-KR0	1142928
			MZCS-1Z8PS-KR0	1142924
Cable, 2-wire, stripped, 0.5 m	–	DC 2-wire	MZCS-1Z8DS-KW0	1142930
Cable, 2-wire, stripped, 3 m	–	DC 2-wire	MZCS-1Z8DS-KWA	1142931
Cable, 3-wire, stripped, 0.5 m	NO	DC 3-wire	MZCS-1Z8NS-KW0	1142926
			MZCS-1Z8PS-KW0	1142922
Cable, 3-wire, stripped, 3 m	NO	DC 3-wire	MZCS-1Z8NS-KWA	1142927
			MZCS-1Z8PS-KWA	1142923

SICK AT A GLANCE

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.”

WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com