Product family overview



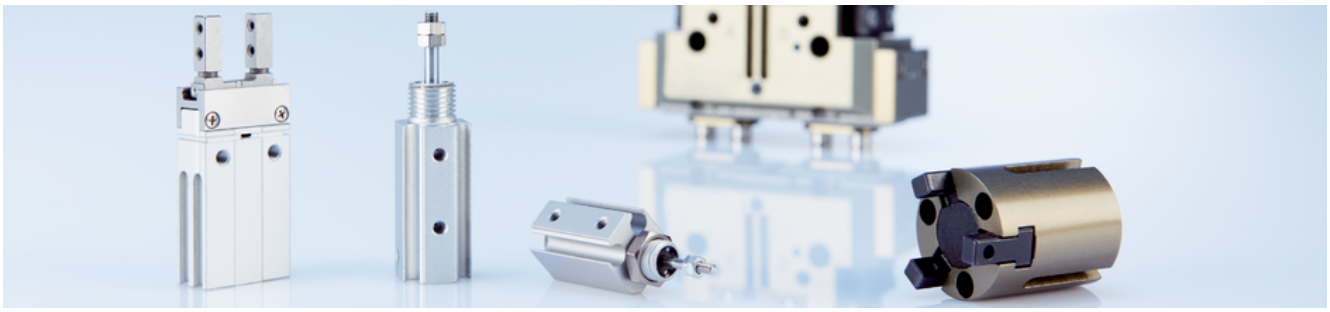
MZCG

Very short cylinder sensors for grippers

SENSORS FOR C-SLOT CYLINDERS

SICK
Sensor Intelligence.

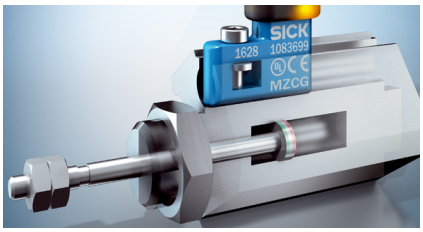
Advantages



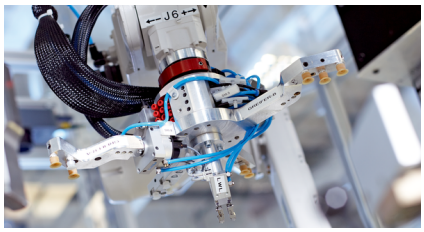
Specially designed for pneumatic grippers and miniature cylinders

The MZCG magnetic cylinder sensor from SICK is specially designed for the detection of piston position in pneumatic grippers and miniature cylinders with C-slots, which are used in handling and assembly, robotics and the electronics industry, to name a few examples. This tiny device shows its true might anywhere space is limited.

MZCG - Extremely short cylinder sensor



With a housing of only 12.2 mm and a 90° rotated radial cable connection, the MZCG is optimal for small drives.

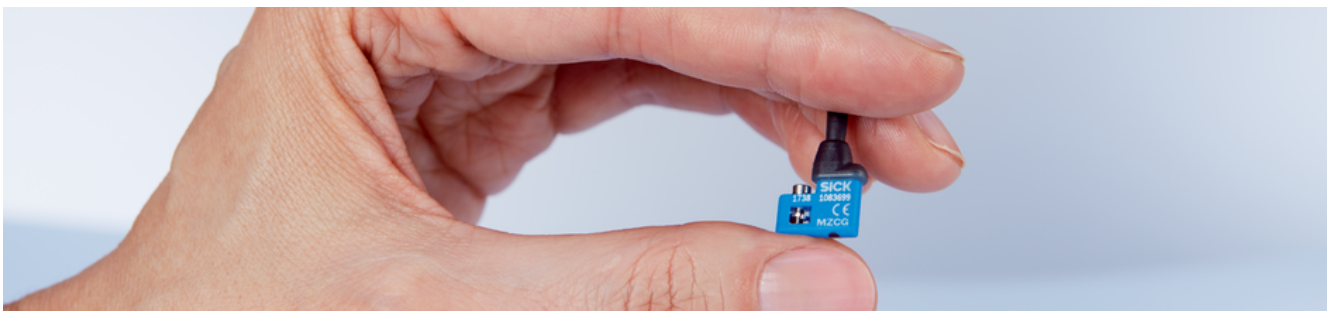


Universal use in a wide range of C-slots of the most common gripper and cylinder manufacturers.



Intelligent fixing concept, the sensor can be locked in no time thanks to the non-detachable screw.

The MZCG fits in a wide range of C-slots of the most common gripper and cylinder manufacturers due to its universal housing design. This reduces storage costs, enables flexible machine design and simplifies service.

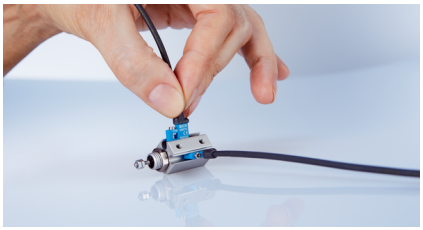


Quick and easy mounting, minimal space requirements

Thanks to the universal construction, the MZCG can be easily inserted into the C-slot from above. The new fixing concept with a non-detachable screw ensures quick and secure fixing in C-slots. A housing of only 12.2 mm and a 90° rotated radial cable

connection allows flexible mounting if space is tight. In spite of the small construction, the sensor ensures maximum functionality at minimum weight.

How it works



Easy drop-in mounting and secure fixing in C-slots thanks to the fixing concept.



Saves space due to the radial cable connection and the small construction.



Comparison mounting MZCG (left gripper) to MZC1 (right gripper).

Drop-in mounting and a cable connection rotated by 90° for reliable installation which saves you time



Technical data overview

Output function	NO / NC (depending on type)
Cylinder types with adapter	SMC rail CDQ2 SMC rail ECDQ2
Housing length	12.2 mm
Supply voltage	10 V DC ... 30 V DC

III

Product description

The MZCG cylinder sensor detects the piston position in pneumatic grippers and pneumatic miniature cylinders. Thanks to its very small design, the MZCG is particularly well-suited for the C-slots of very small pneumatic actuators such as are used in handling and assembly, robotics or the electronics industry. The sensor is simply inserted in the C-slot and can be quickly and safely fastened to the cylinder. The MZCG fits in a wide range of C-slots of various manufacturers due to its universal housing design. This reduces storage costs, enables flexible machine design and easier service.



At a glance

- Extremely small housing (12.2 mm) for applications in pneumatic grippers and miniature cylinders
- Fits in all commonly-used C-slots, e.g. from Schunk, Zimmer, Festo or SMC
- Short, precise switching point, ideal for applications with small stroke
- Cable suitable for drag chain
- LED for indicating the output state
- IP68 enclosure rating

Your benefits

- Extremely small housing saves installation space, thereby increasing efficiency of the system
- Shorter switching point optimized for gripper applications increases process efficiency due to higher PSDI times
- Suitable for a wide range of applications: It fits into all standard C-slots, regardless of the cylinder profile or make
- Reduced storage costs, flexible machine design and easier service
- Inserting the sensor into the slot is quick and easy
- The rugged mounting holds the sensor in the required position, even when exposed to shock and vibration, and increases the reliability

Fields of application

- End position detection in pneumatic cylinders
- End position detection in pneumatic miniature cylinders
- Position detection (open/close) in pneumatic grippers

Ordering information

Other models and accessories ➜ www.sick.com/MZCG

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

Connection type	Switching output	Output function	Type	Part no.
Cable with connector M12, 3-pin, 0.3 m	NPN	NO	MZCG-1Z7NS-KQ0	1083709
	PNP	NO	MZCG-1Z7PS-KQ0	1083707
Cable with connector M8, 3-pin, 0.3 m	NPN	NO	MZCG-1Z7NS-KP0	1083701
	PNP	NO	MZCG-1Z7PS-KP0	1083699
Cable with connector M8, 3-pin, with knurled nuts, 0.5 m	NPN	NC	MZCG-1Z7NO-KR0	1083706
		NO	MZCG-1Z7NS-KR0	1083705
	PNP	NC	MZCG-1Z7PO-KR0	1083704
		NO	MZCG-1Z7PS-KR0	1083703
Cable, 3-wire, 2 m	NPN	NO	MZCG-1Z7NS-KU0	1083713
	PNP	NO	MZCG-1Z7PS-KU0	1083711
Cable, 3-wire, 5 m	NPN	NO	MZCG-1Z7NS-KUB	1083717
	PNP	NO	MZCG-1Z7PS-KUB	1083715

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