Product family overview

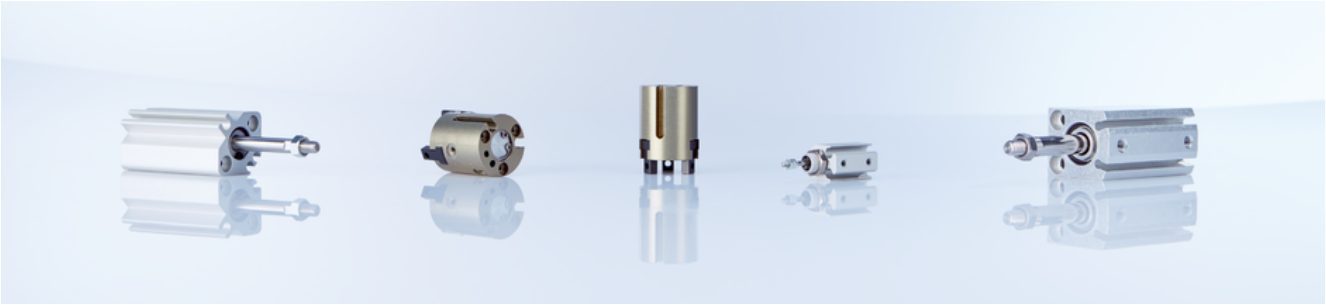
MZC2

Short cylinder sensors for pneumatic grippers and miniature cylinders

SENSORS FOR C-SLOT CYLINDERS

SICK
Sensor Intelligence.

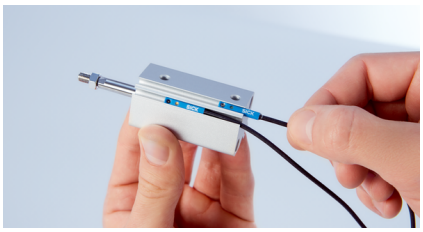
Advantages



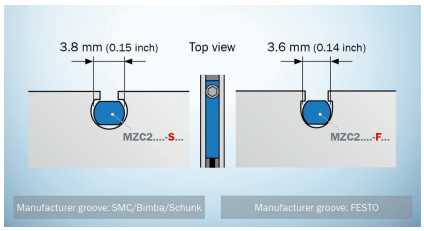
Specially designed for pneumatic grippers and miniature cylinders

The MZC2 magnetic cylinder sensor from SICK is specially designed for detection of the piston position in pneumatic grippers and miniature cylinders with C-slots. The applications therefore include handling and assembly, robotics and the electronics industry, for example. The small sensor comes into its own wherever space is limited.

MZC2 – short cylinder sensor



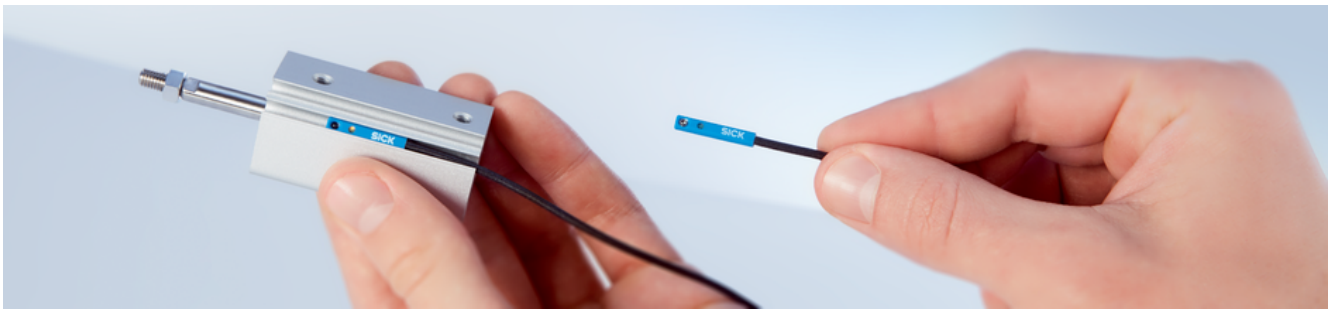
With a housing length of just 19.5 mm and an axial cable connection, the MZC2 is ideal for small drives and is completely recessed in the slot.



Thanks to the choice of two housing variants, the MZC2 fits in a wide range of C-slots of various manufacturers.

Compact sensor housing for short slot geometries where the MZCG is not suitable with its 90-degree cable connection.

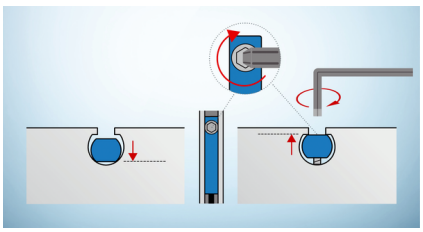
The MZC2 fits in a wide range of C-slots of most gripper and cylinder manufacturers thanks to the choice of two universal housing variants.



Quick and easy mounting, minimal space requirements

Thanks to its universal design, the MZC2 can be easily inserted into C-slots from above. A short housing with a length of just 19.5 mm and an axial cable connection allow the sensor to be completely recessed in the slot. In spite of its compact design, the sensor guarantees full functionality in combination with minimum weight.

How it works



Fixing concept ensures easy drop-in mounting and secure positioning in C-slots

Sensor is fully recessed in the slot to save space

Comparison of MZC2 (right gripper) and MZCG (left gripper)

Drop-in mounting for time-saving and reliable installation

Technical data overview

Output function	NO
Special features	Completely embedded mounting in the slot, providing protection
Cylinder types with adapter	SMC rail ECDQ2 SMC rail CDQ2
Housing length	19.5 mm
Supply voltage	10 V DC ... 30 V DC

Product description

The MZC2 cylinder sensor detects the piston position in pneumatic grippers and pneumatic miniature cylinders. Thanks to its small design, the MZC2 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 sensor sinks completely into the slot. The MZC2 fits in a wide range of C-slots of various manufacturers thanks to the two housing variants.

At a glance

- Short housing (19.5 mm) for use in pneumatic grippers and miniature cylinders
- Fits in all common C-slots, e.g. from SMC, Bimba, Schunk, Zimmer and Festo
- Short, precise switching point, ideal for applications with small stroke
- LED for indicating the output state
- IP67 enclosure rating
- Sensor is fully recessed in the slot

Your benefits

- Short housing saves installation space, thereby increasing system efficiency
- Short switching point optimized for gripper applications increases process efficiency due to higher PSDI times
- Thanks to the choice of two different housing variants, the sensor fits into all common C-slots, regardless of the cylinder profile or make.
- Quick and easy insertion of the sensor into the slot from above
- The rugged mounting holds the sensor in the required position, even when exposed to shock and vibration, and increases 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/MZC2

- **Output function:** NO
- **Electrical wiring:** DC 3-wire
- **Communication interface:** -

Preferred manufacturer slot	Connection type	Switching output	Type	Part no.
Festo, Zimmer, Gimatic	Cable with connector M8, 3-pin, with knurled nuts, 0.5 m	NPN	MZC2-1V7NS-FR0	1099966
		PNP	MZC2-1V7PS-FR0	1099965
			MZC2-1V7PS-FRX	1113680
	Cable, 3-wire, 2 m	NPN	MZC2-1V7NS-FU0	1099968
		PNP	MZC2-1V7PS-FU0	1099967
	Cable, 3-wire, 5 m	PNP	MZC2-1V7PS-FUB	1117464
SMC, Schunk, PHD, Bimba	Cable with connector M12, 3-pin, with knurled nuts, 0.5 m	PNP	MZC2-1V7PS-SQD	1111053
	Cable with connector M8, 3-pin, with knurled nuts, 0.5 m	NPN	MZC2-1V7NS-SR0	1099972
		PNP	MZC2-1V7PS-SR0	1099970
			MZC2-1V7PS-SRX	1113681
	Cable, 3-wire, 2 m	NPN	MZC2-1V7NS-SU0	1099975
		PNP	MZC2-1V7PS-SU0	1099974

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

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