

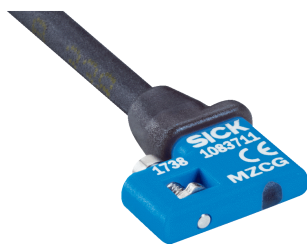


# MZCG-1Z7PSAKR0

MZCG VIA

SENSORS FOR C-SLOT CYLINDERS

**SICK**  
Sensor Intelligence.



### Ordering information

Type	Part no.
MZCG-1Z7PSAKRO	1091296

Other models and accessories → [www.sick.com/MZCG\\_VIA](http://www.sick.com/MZCG_VIA)



### Detailed technical data

#### Features

<b>Cylinder type</b>	C-slot
<b>Cylinder types with adapter</b>	SMC rail CDQ2 SMC rail ECDQ2
<b>Housing length</b>	12.2 mm
<b>Switching output</b>	PNP
<b>Switching frequency</b>	1,000 Hz
<b>Output function</b>	NO
<b>Electrical wiring</b>	DC 3-wire
<b>Enclosure rating</b>	IP68
<b>Special features</b>	Visual installation aid/LED indicator (yellow) Power LED (green) Interior housing temperature (via IO-Link) Counter function (via IO-Link)
<b>Adjustment</b>	IO-Link NC or NO Switch-on or switch-off delay (up to 1.6 seconds)

#### Mechanics/electronics

<b>Supply voltage</b>	10 V DC ... 30 V DC
<b>Power consumption</b>	7 mA <sup>1)</sup>
<b>Voltage drop</b>	≤ 2.5 V
<b>Continuous current I<sub>a</sub></b>	≤ 100 mA
<b>Protection class</b>	III
<b>Response sensitivity, typ.</b>	1.7 mT
<b>Overrun distance, typ.</b>	2 mm
<b>Hysteresis, typ.</b>	≤ 0.4 mT

<sup>1)</sup> Without load.

<sup>2)</sup> U<sub>b</sub> and T<sub>a</sub> constant.

<b>Reproducibility</b>	$\leq 0.1 \text{ mT}^2$
<b>IO-Link</b>	✓
<b>Reverse polarity protection</b>	✓
<b>Short-circuit protection</b>	✓
<b>Power-up pulse protection</b>	✓
<b>Ambient operating temperature</b>	-30 °C ... +80 °C
<b>MTTFd: mean time to dangerous failure</b>	1,790 years
<b>Shock and vibration resistance</b>	30 g, 11 ms / 10 ... 55 Hz, 1 mm
<b>EMC</b>	According to EN 60947-5-2
<b>Connection type</b>	Cable with connector M8, 3-pin, with knurled nuts, drag chain use, 0.5 m
<b>Connection type Detail</b>	
Conductor cross-section	0.14 mm <sup>2</sup>
Cable diameter	Ø 2.9 mm
Bending radius	With fixed installation > 3 x cable diameter For flexible use > 5 x cable diameter
Torsion force	± 270° / 10 cm
Torsion cycles	2,000,000
Cable outlet	Radial
<b>Material</b>	
Housing	Plastic
Cable	PUR
<b>Special features</b>	Visual installation aid/LED indicator (yellow), Power LED (green), interior housing temperature (via IO-Link), counter function (via IO-Link)
<b>UL File No.</b>	NRKH.E181493 & NRKH7.E181493

<sup>1)</sup> Without load.

<sup>2)</sup>  $U_b$  and  $T_a$  constant.

### Safety-related parameters

<b>MTTF<sub>D</sub></b>	1,790 years
<b>DC<sub>avg</sub></b>	0%

### Communication interface

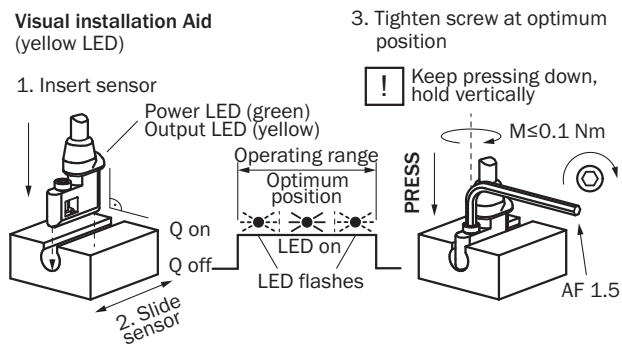
<b>Communication interface</b>	IO-Link V1.1
<b>Communication Interface detail</b>	COM2 (38,4 kBaud)
<b>Cycle time</b>	2.3 ms
<b>Process data length</b>	16 Bit
<b>Process data structure</b>	Bit 0 = switching signal $Q_{L1}$ Bit 1 = switching signal $Q_{L2}$ Bit 2 ... 15 = empty
<b>VendorID</b>	26
<b>DeviceID HEX</b>	0x80015D
<b>DeviceID DEC</b>	8388957

### Classifications

<b>ECI@ss 5.0</b>	27270104
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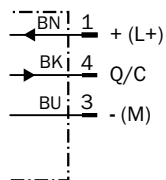
<b>ECl@ss 5.1.4</b>	27270104
<b>ECl@ss 6.0</b>	27270104
<b>ECl@ss 6.2</b>	27270104
<b>ECl@ss 7.0</b>	27270104
<b>ECl@ss 8.0</b>	27270104
<b>ECl@ss 8.1</b>	27270104
<b>ECl@ss 9.0</b>	27270104
<b>ECl@ss 10.0</b>	27270104
<b>ECl@ss 11.0</b>	27270104
<b>ETIM 5.0</b>	EC002544
<b>ETIM 6.0</b>	EC002544
<b>ETIM 7.0</b>	EC002544
<b>UNSPSC 16.0901</b>	39122230

### Installation note



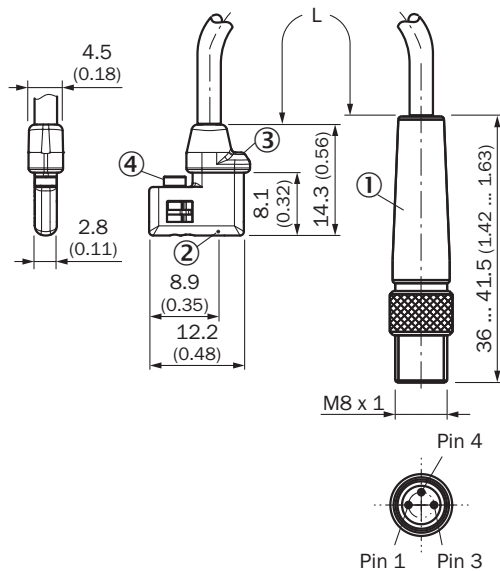
### Connection diagram

Cd-401



**Dimensional drawing** (Dimensions in mm (inch))

Cable with connector M8, with knurled nuts





- ① Connection
- ② Position sensor element
- ③ Indication LED
- ④ Fixing screw SW 1.5

Part no.	Type	L	Number of cores
1091296	MZCG-1Z7PSAKRO	500 mm	3

**Recommended accessories**

Other models and accessories → [www.sick.com/MZCG\\_VIA](http://www.sick.com/MZCG_VIA)

	Brief description	Type	Part no.
<b>Plug connectors and cables</b>			
	Head A: female connector, M8, 3-pin, straight Head B: - Cable: unshielded	DOS-0803-G	7902077
	Head A: female connector, M8, 3-pin, angled Head B: - Cable: unshielded	DOS-0803-W	7902078

### Recommended services

Additional services → [www.sick.com/MZCG\\_VIA](http://www.sick.com/MZCG_VIA)

	Type	Part no.
Function Block Factory		
<ul style="list-style-type: none"><li><b>Brief description:</b> The Function Block Factory supports common programmable logic controllers (PLCs) from various manufacturers, such as Siemens, Beckhoff, Rockwell Automation and B&amp;R. More information on the FBF can be found <a _blank"&gt;="" a="" here<="" href="https://fbf.cloud.sick.com/target=">.</a></li></ul>	Function Block Factory	On request

## 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](http://www.sick.com)