



# MZCG-1Z7PSAKR0

MZCG VIA

CYLINDER SENSORS

**SICK**  
Sensor Intelligence.



### Ordering information

Type	part no.
MZCG-1Z7PSAKR0	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, IO-Link
<b>Electrical wiring</b>	DC 3-wire
<b>Enclosure rating</b>	IP68
<b>Adjustment</b>	
	IO-Link NC or NOSwitch-on or switch-off delay (up to 1.6 seconds)
<b>Special features</b>	Visual installation aid/LED indicator (yellow) Power LED (green) Interior housing temperature (via IO-Link) Counter function (via IO-Link)

#### Mechanics/electronics

<b>Supply voltage</b>	10 V DC ... 30 V DC
<b>Power consumption</b>	7 mA, without load
<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
<b>Reproducibility</b>	≤ 0.1 mT <sup>1)</sup>
<b>Reverse polarity protection</b>	Yes
<b>Short-circuit protection</b>	Yes
<b>Status indicator LED</b>	Yes
<b>Teach-in</b>	No

<sup>1)</sup> Supply voltage U<sub>B</sub> and constant ambient temperature T<sub>a</sub>.

<b>Power-up pulse protection</b>	Yes
<b>Ambient operating temperature</b>	-30 °C ... +80 °C
<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 nut, 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
Drag chain cycles	> 2,000,000
Drag chain parameters	Permissible acceleration max. 5 m/s Permissible product travel path horizontal 5 m at acceleration max. 5 m/s <sup>2</sup> Permissible product travel path vertical 2 m at acceleration max. 5 m/s <sup>2</sup> Permissible traversing speed at 5 m at horizontal product travel path max. 200 m/min
Cable outlet	Radial
<b>Material</b>	
Housing	Plastic
Cable	PUR
<b>UL File No.</b>	NRKH.E181493 & NRKH7.E181493

<sup>1)</sup> Supply voltage  $U_B$  and constant ambient temperature  $T_a$ .

### Safety-related parameters

<b>MTTF<sub>D</sub></b>	1,432 years
<b>DC<sub>avg</sub></b>	0 %
<b>T<sub>M</sub> (mission time)</b>	20 years

### 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

### Certificates

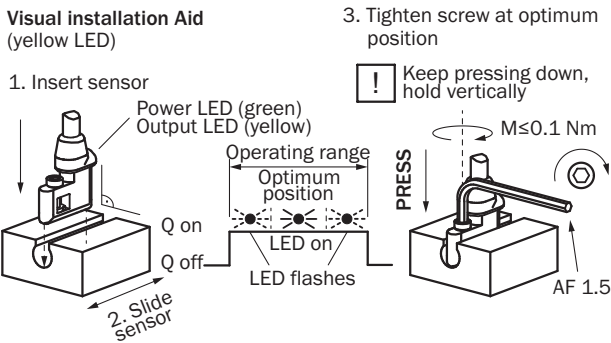
<b>EU declaration of conformity</b>	✓
<b>ACMA declaration of conformity</b>	✓

Moroccan declaration of conformity	✓
China-RoHS	✓

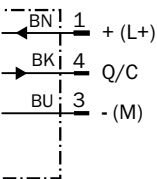
Classifications

ECLASS 5.0	27270104
ECLASS 5.1.4	27270104
ECLASS 6.0	27270104
ECLASS 6.2	27270104
ECLASS 7.0	27270104
ECLASS 8.0	27270104
ECLASS 8.1	27270104
ECLASS 9.0	27270104
ECLASS 10.0	27270104
ECLASS 11.0	27270104
ECLASS 12.0	27274301
ETIM 5.0	EC002544
ETIM 6.0	EC002544
ETIM 7.0	EC002544
ETIM 8.0	EC002544
UNSPSC 16.0901	39122230

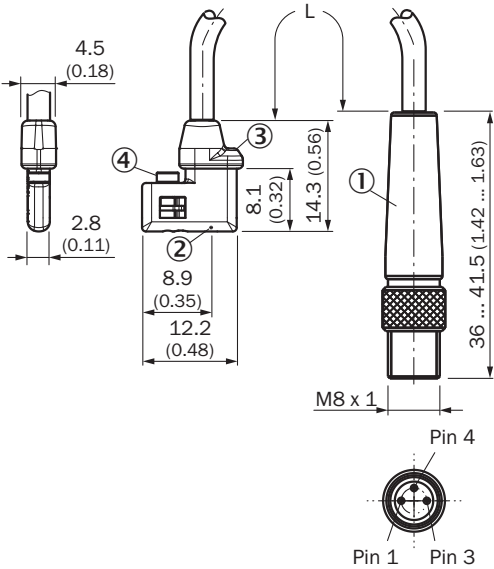
Installation note



Connection diagram Cd-401



Dimensional drawing Cable with connector M8, with knurled nut





- Dimensions in mm (inch)
- ① Connection
  - ② Position sensor element
  - ③ Display LED
  - ④ Fixing screw SW 1.5

Part no.	Type	L	Number of cores
1091296	MZCG-1Z7PSAKR0	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.
connectors and cables			
	<ul style="list-style-type: none"><li>• <b>Connection type head A:</b> Female connector, M8, 3-pin, straight, A-coded</li><li>• <b>Description:</b> Unshielded</li><li>• <b>Connection systems:</b> Screw-type terminals</li><li>• <b>Permitted cross-section:</b> 0.14 mm² ... 0.5 mm²</li></ul>	DOS-0803-G	7902077
	<ul style="list-style-type: none"><li>• <b>Connection type head A:</b> Female connector, M8, 3-pin, angled, A-coded</li><li>• <b>Description:</b> Unshielded</li><li>• <b>Connection systems:</b> Solder connection</li><li>• <b>Permitted cross-section:</b> ≤ 0.25 mm²</li></ul>	DOS-0803-W	7902078

## 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:

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