



# MZCG-1Z7PS-KP0

MZCG

SENSORS FOR C-SLOT CYLINDERS

**SICK**  
Sensor Intelligence.



### Ordering information

Type	Part no.
MZCG-1Z7PS-KPO	1083699

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



### 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

#### 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
<b>Reproducibility</b>	≤ 0.1 mT <sup>2)</sup>
<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

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

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

<b>EMC</b>	According to EN 60947-5-2	
<b>Connection type</b>	Cable with connector M8, 3-pin, drag chain use, 0.3 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 > 10 x cable diameter	
Torsion force	± 270° / 10 cm	
Torsion cycles	2,000,000	
Cable outlet	Radial	
<b>Material</b>		
Housing	Plastic	
Cable	PUR	
<b>UL File No.</b>	NRKH.E181493 & NRKH7.E181493	

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

<sup>2)</sup> Ub and Ta constant.

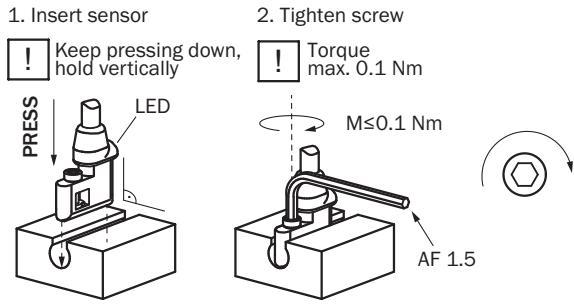
### Safety-related parameters

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

### Classifications

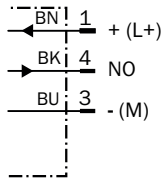
<b>ECI@ss 5.0</b>	27270104
<b>ECI@ss 5.1.4</b>	27270104
<b>ECI@ss 6.0</b>	27270104
<b>ECI@ss 6.2</b>	27270104
<b>ECI@ss 7.0</b>	27270104
<b>ECI@ss 8.0</b>	27270104
<b>ECI@ss 8.1</b>	27270104
<b>ECI@ss 9.0</b>	27270104
<b>ECI@ss 10.0</b>	27270104
<b>ECI@ss 11.0</b>	27270104
<b>ETIM 5.0</b>	EC002544
<b>ETIM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

**Installation note**



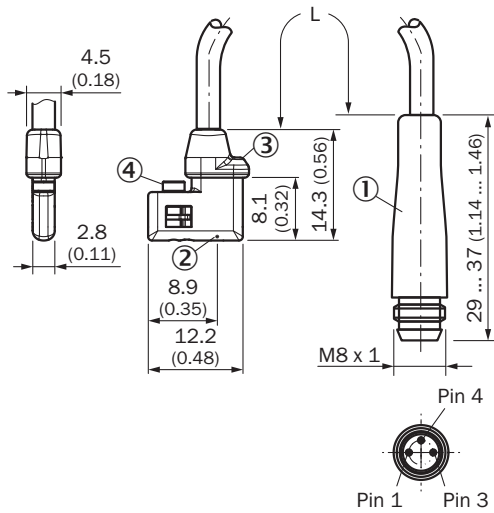
**Connection diagram**

Cd-002



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

Cable with connector M8







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

Part no.	Type	L	Number of cores
1083699	MZCG-1Z7PS-KP0	300 mm	3
1083701	MZCG-1Z7NS-KP0	300 mm	3

## Recommended accessories

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

	Brief description	Type	Part no.
Plug connectors and cables			
	Head A: female connector, M8, 3-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 2 m	YF8U13-020UA1XLEAX	2094782
	Head A: female connector, M8, 3-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 5 m	YF8U13-050UA1XLEAX	2094788
	Head A: female connector, M8, 3-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 2 m	YG8U13-020UA1XLEAX	2094794
	Head A: female connector, M8, 3-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 5 m	YG8U13-050UA1XLEAX	2095586
	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

## 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)