MZCG-1Z7PS-KR0

MZCG

SENSORS FOR C-SLOT CYLINDERS

SICK
Sensor Intelligence.

Ordering information

Type	Part no.
MZCG-1Z7PS-KR0	1083703

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

Detailed technical data

Features

Cylinder type	C-slot
Cylinder types with adapter	SMC rail CDQ2 SMC rail ECDQ2
Housing length	12.2 mm
Switching output	PNP
Switching frequency	1,000 Hz
Output function	NO
Electrical wiring	DC 3-wire
Enclosure rating	IP68

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC
Power consumption	7 mA [1]
Voltage drop	≤ 2.5 V
Continuous current I_a	≤ 100 mA
Protection class	III
Response sensitivity, typ.	1.7 mT
Overrun distance, typ.	2 mm
Hysteresis, typ.	≤ 0.4 mT
Reproducibility	≤ 0.1 mT [2]
Reverse polarity protection	✓
Short-circuit protection	✓
Power-up pulse protection	✓
Ambient operating temperature	–30 °C ... +80 °C
MTTFd: mean time to dangerous failure	1,790 years
Shock and vibration resistance	30 g, 11 ms / 10 ... 55 Hz, 1 mm

[1] Without load.
[2] Ub and Ta constant.

EMC	According to EN 60947-5-2
Connection type	Cable with connector M8, 3-pin, with knurled nuts, drag chain use, 0.5 m
Connection type Detail	
Conductor cross-section	0.14 mm²
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
Material	
Housing	Plastic
Cable	PUR
UL File No.	NRKH.E181493 & NRKH7.E181493

[1] Without load.
[2] Ub and Ta constant.

Safety-related parameters

$MTTF_D$	1,790 years
DC_{avg}	0%

Classifications

ECl@ss 5.0	27270104
ECl@ss 5.1.4	27270104
ECl@ss 6.0	27270104
ECl@ss 6.2	27270104
ECl@ss 7.0	27270104
ECl@ss 8.0	27270104
ECl@ss 8.1	27270104
ECl@ss 9.0	27270104
ECl@ss 10.0	27270104
ECl@ss 11.0	27270104
ETIM 5.0	EC002544
ETIM 6.0	EC002544
ETIM 7.0	EC002544
UNSPSC 16.0901	39122230

Installation note

1. Insert sensor

! Keep pressing down, hold vertically

PRESS — LED

2. Tighten screw

! Torque max. 0.1 Nm

M≤0.1 Nm

AF 1.5
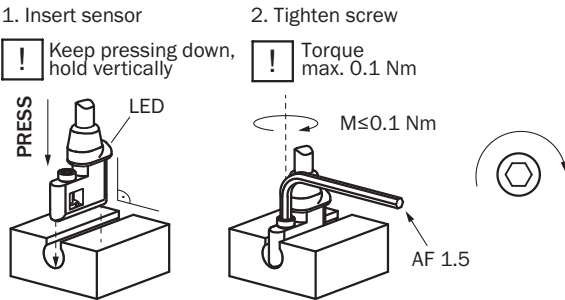
Connection diagram

Cd-002

BN 1 + (L+)
BK 4 NO
BU 3 - (M)
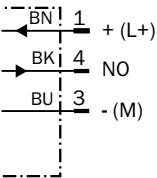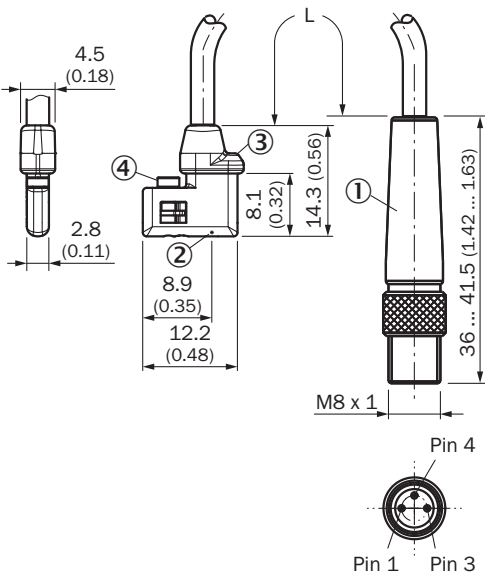
Dimensional drawing (Dimensions in mm (inch))

Cable with connector M8, with knurled nuts

4.5 (0.18)
2.8 (0.11)
③
④
8.1 (0.32)
14.3 (0.56)
②
①
8.9 (0.35)
12.2 (0.48)
36 ... 41.5 (1.42 ... 1.63)
M8 x 1

Pin 4
Pin 1   Pin 3

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

Part no.	Type	L	Number of cores
1083703	MZCG-1Z7PS-KR0	500 mm	3
1083704	MZCG-1Z7PO-KR0	500 mm	3

Part no.	Type	L	Number of cores
1083705	MZCG-1Z7NS-KR0	500 mm	3
1083706	MZCG-1Z7NO-KR0	500 mm	3

Recommended accessories

Other models and accessories ➜ 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."

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