



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



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, IO-Link
Electrical wiring	DC 3-wire
Enclosure rating	IP68
Adjustment	
	IO-Link NC or NOSwitch-on or switch-off delay (up to 1.6 seconds)
Special features	Visual installation aid/LED indicator (yellow) Power LED (green) Interior housing temperature (via IO-Link) Counter function (via IO-Link)

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC
Power consumption	7 mA, without load
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 ¹⁾
Reverse polarity protection	Yes
Short-circuit protection	Yes
Status indicator LED	Yes
Teach-in	No

¹⁾ Supply voltage U_B and constant ambient temperature T_a.

Power-up pulse protection	Yes
Ambient operating temperature	-30 °C ... +80 °C
Shock and vibration resistance	30 g, 11 ms / 10 ... 55 Hz, 1 mm
EMC	According to EN 60947-5-2
Connection type	Cable with connector M8, 3-pin, with knurled nut, drag chain use, 0.5 m
Connection type Detail	
Conductor cross section	0.14 mm ²
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 ² Permissible product travel path vertical 2 m at acceleration max. 5 m/s ² Permissible traversing speed at 5 m at horizontal product travel path max. 200 m/min
Cable outlet	Radial
Material	
Housing	Plastic
Cable	PUR
UL File No.	NRKH.E181493 & NRKH7.E181493

¹⁾ Supply voltage U_B and constant ambient temperature T_a .

Safety-related parameters

MTTF_D	1,432 years
DC_{avg}	0 %
T_M (mission time)	20 years

Communication interface

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

Certificates

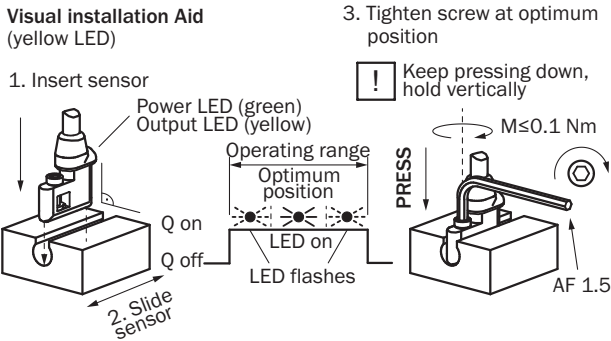
EU declaration of conformity	✓
ACMA declaration of conformity	✓

Moroccan declaration of conformity	✓
China-RoHS	✓

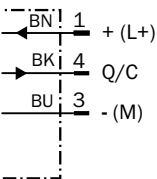
Classifications

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

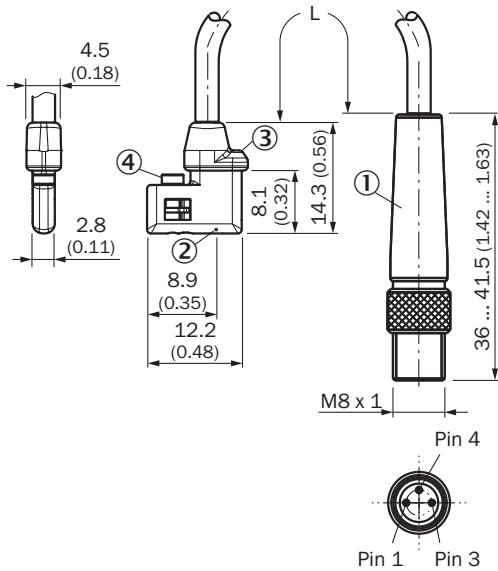
Installation note



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

	Brief description	Type	part no.
connectors and cables			
	<ul style="list-style-type: none"> Connection type head A: Female connector, M8, 3-pin, straight, A-coded Description: Unshielded Connection systems: Screw-type terminals Permitted cross-section: 0.14 mm² ... 0.5 mm² 	DOS-0803-G	7902077
	<ul style="list-style-type: none"> Connection type head A: Female connector, M8, 3-pin, angled, A-coded Description: Unshielded Connection systems: Solder connection Permitted cross-section: ≤ 0.25 mm² 	DOS-0803-W	7902078

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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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