



MZC1-2V2PSAKRD

MZC1 VIA

SENSORS FOR C-SLOT CYLINDERS

SICK
Sensor Intelligence.



Ordering information

Type	Part no.
MZC1-2V2PSAKRD	1089290

Other models and accessories → www.sick.com/MZC1_VIA



Detailed technical data

Features

Cylinder type	C-slot
Cylinder types with adapter	SMC rail CDQ2 SMC rail ECDQ2 Round body cylinder Profile cylinders and tie-rod cylinders
Housing length	23.7 mm
Switching output	PNP
Switching frequency	1,000 Hz
Output function	NO
Electrical wiring	DC 3-wire
Enclosure rating	IP68 ¹⁾
Adjustment	IO-Link NC or NO Switch-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)

¹⁾ According to EN 60529 (IP 67 / IP 68).

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC
Power consumption	8 mA, without load
Voltage drop	≤ 2.5 V
Continuous current I_a	≤ 100 mA
Protection class	III
Response sensitivity, typ.	2.2 mT

¹⁾ U_b and T_a constant.

Overrun distance, typ.	4 mm
Hysteresis, typ.	≤ 0.8 mT
Reproducibility	≤ 0.1 mT ¹⁾
Reverse polarity protection	Yes
Short-circuit protection	Yes
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 nuts, drag chain use, 0.5 m
Connection type Detail	
Conductor cross section	0.09 mm ²
Cable diameter	Ø 2.2 mm
Bending radius	With fixed installation > 2 x cable diameter For flexible use > 5 x cable diameter
Torsion force	± 270° / 0.1 m
Torsion cycles	300,000
Drag chain cycles	5,000,000
Drag chain parameters	Traversing speed max. 3 m/s Acceleration max. 10 m/s ² Bending cycles in the drag chain min. 5 million
Cable outlet	Axial
Material	
Housing	Plastic
Cable	PUR
UL File No.	NRKH.E181493 & NRKH7.E181493

¹⁾ Ub and Ta constant.

Safety-related parameters

MTTF_D	1,428 years
DC_{avg}	0 %
T_M (mission time)	20 years

Communication interface

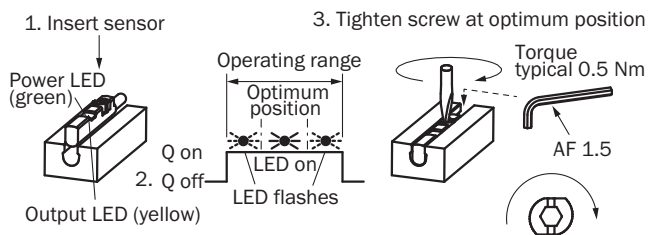
Communication interface	IO-Link V1.0
Communication Interface detail	COM2 (38,4 kBaud)
Cycle time	10.4 ms
Process data length	8 Bit
Process data structure	Bit 0 = switching signal Q _{L1} Bit 1 = switching signal Q _{L2} Bit 2 ... 7 = empty
VendorID	26
DeviceID HEX	0x80015D
DeviceID DEC	8388957

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
eCl@ss 12.0	27274301
ETIM 5.0	EC002544
ETIM 6.0	EC002544
ETIM 7.0	EC002544
ETIM 8.0	EC002544
UNSPSC 16.0901	39122230

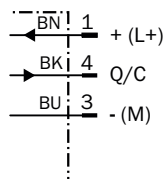
Installation note

Visual installation aid
(yellow LED)



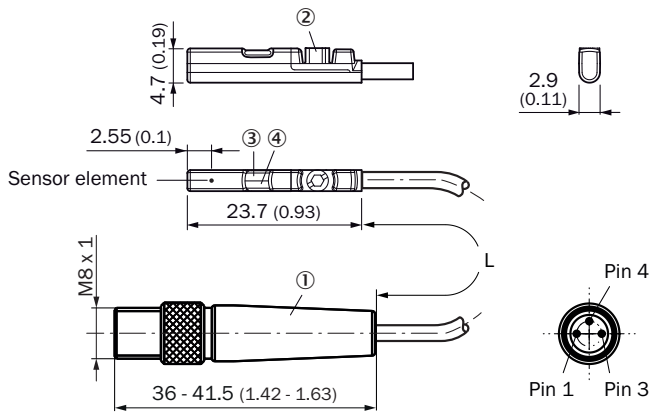
Connection diagram

Cd-401



Dimensional drawing (Dimensions in mm (inch))

Cable with connector M8, with knurled nuts



- ① Connection
- ② Fixing screw SW 1.5
- ③ Visual installation aid/LED indicator (yellow)
- ④ Power LED (green)

Part no.	Type	L	Number of cores
1079047	MZC1-2V2PSAKR0	300 mm	3
1089290	MZC1-2V2PSAKRD	500 mm	3


Recommended accessories

Other models and accessories → www.sick.com/MZC1_VIA

	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, PVC, unshielded, 2 m	YF8U13-020VA1XLEAX	2095860
	Head A: female connector, M8, 3-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 5 m	YF8U13-050VA1XLEAX	2095884
	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, PVC, unshielded, 2 m	YG8U13-020VA1XLEAX	2096165
	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, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 5 m	YG8U13-050VA1XLEAX	2096166
	Head A: female connector, M8, 3-pin, straight Cable: unshielded	DOS-0803-G	7902077

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	Brief description	Type	Part no.
	Head A: female connector, M8, 3-pin, angled 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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