MZC1-2V2PS-KRD

MZC1

SENSORS FOR C-SLOT CYLINDERS

SICK
Sensor Intelligence.

MZC1-2V2PS-KRD | MZC1

SENSORS FOR C-SLOT CYLINDERS

Ordering information

Type	Part no.
MZC1-2V2PS-KRD	1060129

Other models and accessories ➜ www.sick.com/MZC1

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

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC
Power consumption	8 mA [1]
Voltage drop	≤ 2.5 V
Continuous current I_a	≤ 100 mA
Protection class	III
Response sensitivity, typ.	2.2 mT
Overrun distance, typ.	4 mm
Hysteresis, typ.	≤ 0.8 mT
Reproducibility	≤ 0.1 mT [2]
Reverse polarity protection	✓
Short-circuit protection	✓
Power-up pulse protection	✓
Ambient operating temperature	−30 °C ... +80 °C

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

MTTFd: mean time to dangerous failure	1,830 years
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 mm²
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
Cable outlet	Axial
Material	
Housing	Plastic
Cable	PUR
UL File No.	NRKH.E181493 & NRKH7.E181493

[1] Without load.

[2] Ub and Ta constant.

Safety-related parameters

$MTTF_D$	1,830 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

Insert sensor

LED

Tighten screw

Torque
typical 0.5 Nm

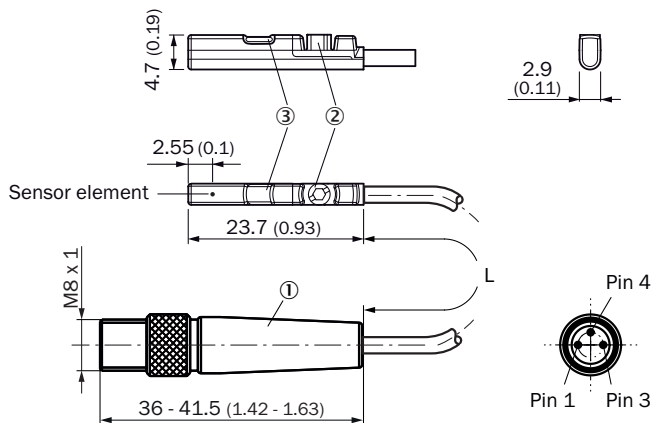AF 1.5
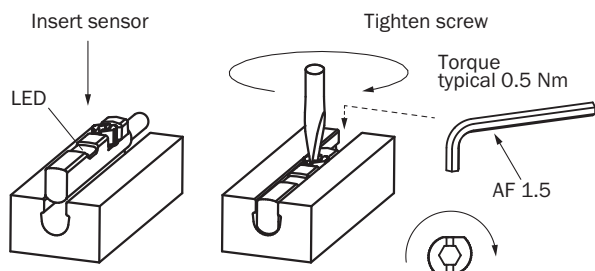
Connection diagram

Cd-002

BN | 1   + (L+)

BK | 4   NO

BU | 3   - (M)
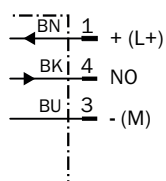
Dimensional drawing (Dimensions in mm (inch))

Cable with connector M8, with knurled nuts

4.7 (0.19)

2.9 (0.11)

③   ②

2.55 (0.1)

Sensor element

23.7 (0.93)

M8 x 1

①

L

Pin 4

Pin 1   Pin 3

36 - 41.5 (1.42 - 1.63)

① Connection
② Fixing screw SW 1.5
③ Indication LED

Part no.	Type	L	Number of cores
1092528	MZC1-2V2DS-KR0	300 mm	2
1059737	MZC1-2V2PS-KR0	300 mm	3
1059742	MZC1-2V2NS-KR0	300 mm	3
1059753	MZC1-4V3PS-KR0	300 mm	3
1060129	MZC1-2V2PS-KRD	500 mm	3
1068562	MZC1-2V2NS-KRD	500 mm	3
1068616	MZC1-6V0PS-KRDS04	500 mm	3

Part no.	Type	L	Number of cores
1068618	MZC1-6V0PO-KRDS05	500 mm	3
1068622	MZC1-6V0NS-KRDS06	500 mm	3
1068624	MZC1-6V0NO-KRDS07	500 mm	3
1068563	MZC1-2V2PS-KRDS02	1 m	3
1068564	MZC1-2V2NS-KRDS03	1 m	3

Recommended accessories

Other models and accessories ➜ www.sick.com/MZC1

	Brief description	Type	Part no.
Brackets for cylinder sensors			
	Mounting bracket for integrated profile cylinder/tie-rod cylinder, Zinc diecast, mounting hardware included	BEF-KHZ-PC1	2076170
	1 piece, Mounting bracket on round body cylinder with piston diameter of 12 mm, ambient temperature min 0 °C max 50 °C, plastic, Aluminum	BEF-KHZ-RC-12	2077673
	1 piece, Mounting bracket on round body cylinder with piston diameter of 16 mm, ambient temperature min 0 °C max 50 °C, plastic, Aluminum	BEF-KHZ-RC-16	2077672
	1 piece, Mounting bracket on round body cylinder with piston diameter of 20 mm, ambient temperature min 0 °C max 50 °C, plastic, Aluminum	BEF-KHZ-RC-20	2077671
	1 piece, Mounting bracket on round body cylinder with piston diameter of 25 mm, ambient temperature min 0 °C max 50 °C, plastic, Aluminum	BEF-KHZ-RC-25	2077670
	1 piece, Mounting bracket on round body cylinder with piston diameter of 32 mm, ambient temperature min 0 °C max 50 °C, plastic, Aluminum	BEF-KHZ-RC-32	2077669
	1 piece, Mounting bracket on round body cylinder with piston diameter of 40 mm, ambient temperature min 0 °C max 50 °C, plastic, Aluminum	BEF-KHZ-RC-40	2077668
	1 piece, Mounting bracket on round body cylinder with piston diameter of 50 mm, ambient temperature min 0 °C max 50 °C, plastic, Aluminum	BEF-KHZ-RC-50	2077667
	1 piece, Mounting bracket on round body cylinder with piston diameter of 63 mm, ambient temperature min 0 °C max 50 °C, plastic, Aluminum	BEF-KHZ-RC-63	2077666
	1 piece, Mounting bracket on round body cylinder with piston diameter of 1 mm ... 130 mm, ambient temperature min –30 °C max 80 °C, stainless steel, Aluminum	BEF-KHZ-RC1-130	2077686
	1 piece, Mounting bracket on round body cylinder with piston diameter of 1 mm ... 25 mm, ambient temperature min –30 °C max 80 °C, stainless steel, Aluminum	BEF-KHZ-RC1-25	2077685
	Mounting bracket for mounting on SMC rails CDQ2 (C-slot), Aluminum	BEF-KHZ-TC2	2046442
	Mounting bracket for mounting on SMC rails ECDQ2 (C-slot), Aluminum, without mounting hardware	BEF-KHZ-TC1	2046441

	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 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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