

MZC1-2V2PS-KQTS18

MZC1 Twin

CYLINDER SENSORS

SICK
Sensor Intelligence.



Ordering information

| Type | part no. |
|-------------------|----------|
| MZC1-2V2PS-KQTS18 | 1095688 |

Other models and accessories → www.sick.com/MZC1_Twin



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 | 2 x PNP |
| Switching frequency | 1,000 Hz |
| Output function | 2 x N/O contact |
| Electrical wiring | DC 4-wire |
| Enclosure rating | IP68 |
| Special features | Two sensor heads on one plug |

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 |
| Overrun distance, typ. | 4 mm ¹⁾ |
| Hysteresis, typ. | ≤ 0.8 mT |
| Reproducibility | ≤ 0.1 mT ²⁾ |
| Reverse polarity protection | Yes |
| Short-circuit protection | Yes |
| Status indicator LED | Yes |
| Teach-in | No |
| Power-up pulse protection | Yes |

¹⁾ Distance covered by the encoder magnet while the sensor outputs a switching signal.

²⁾ Supply voltage U_B and constant ambient temperature T_a.

| | |
|---------------------------------------|---|
| 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 M12 male connector, 4-pin, 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 |
| Cable outlet | Axial |
| Material | |
| Housing | Plastic |
| Cable | PUR |

¹⁾ Distance covered by the encoder magnet while the sensor outputs a switching signal.

²⁾ Supply voltage U_B and constant ambient temperature T_a .

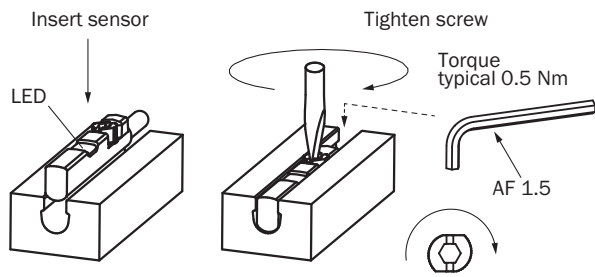
Certificates

| | |
|---|---|
| EU declaration of conformity | ✓ |
| UK declaration of conformity | ✓ |
| ACMA declaration of conformity | ✓ |
| Moroccan declaration of conformity | ✓ |
| China RoHS | ✓ |
| cULus certificate | ✓ |

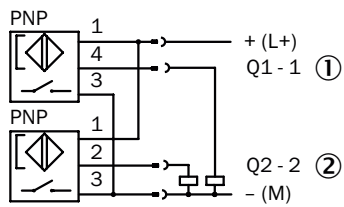
Classifications

| | |
|-----------------------|----------|
| 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-420



- ① sensor head 1
- ② sensor head 2

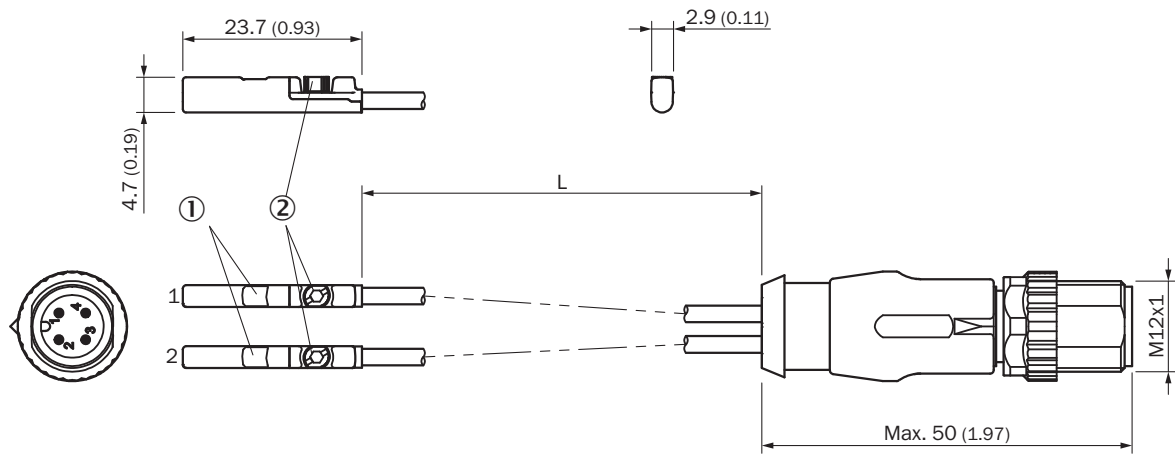
Functional principle Overrun distance



Note: Sensor housing may differ; representation corresponds to "NO contact" output function; overrun distance = switching point width + hysteresis

- ① Position sensor element
- ② Width of the switching point
- ③ Hysteresis
- ④ Direction of movement of the magnet

Dimensional drawing



Dimensions in mm (inch)


- ① Display LED
- ② Fixing screw SW 1.5

| Part no. | Type | L |
|----------|-------------------|-------|
| 1095688 | MZC1-2V2PS-KQTS18 | 0.5 m |

Recommended accessories

Other models and accessories → www.sick.com/MZC1_Twin

| | Brief description | Type | part no. |
|---|---|-----------------|----------|
| Mounting systems | | | |
|  | <ul style="list-style-type: none"> Description: Mounting bracket on round body cylinder with piston diameter of 1 mm ... 25 mm, ambient temperature min -30 °C max 80 °C Material: Stainless steel, Aluminum Details: Stainless steel, Aluminum Packing unit: 1 piece Suitable for: C-slot | BEF-KHZ-RC1-25 | 2077685 |
|  | <ul style="list-style-type: none"> Description: Mounting bracket on round body cylinder with piston diameter of 1 mm ... 130 mm, ambient temperature min -30 °C max 80 °C Material: Stainless steel, Aluminum Details: Stainless steel, Aluminum Packing unit: 1 piece Suitable for: C-slot | BEF-KHZ-RC1-130 | 2077686 |
|  | <ul style="list-style-type: none"> Description: Mounting bracket on round body cylinder with piston diameter of 63 mm, ambient temperature min 0 °C max 50 °C Material: Plastic, Aluminum Details: Plastic, Aluminum Packing unit: 1 piece Suitable for: C-slot | BEF-KHZ-RC-63 | 2077666 |
|  | <ul style="list-style-type: none"> Description: Mounting bracket on round body cylinder with piston diameter of 50 mm, ambient temperature min 0 °C max 50 °C Material: Plastic, Aluminum Details: Plastic, Aluminum Packing unit: 1 piece Suitable for: C-slot | BEF-KHZ-RC-50 | 2077667 |
|  | <ul style="list-style-type: none"> Description: Mounting bracket on round body cylinder with piston diameter of 40 mm, ambient temperature min 0 °C max 50 °C Material: Plastic, Aluminum Details: Plastic, Aluminum Packing unit: 1 piece Suitable for: C-slot | BEF-KHZ-RC-40 | 2077668 |
|  | <ul style="list-style-type: none"> Description: Mounting bracket on round body cylinder with piston diameter of 32 mm, ambient temperature min 0 °C max 50 °C Material: Plastic, Aluminum Details: Plastic, Aluminum Packing unit: 1 piece Suitable for: C-slot | BEF-KHZ-RC-32 | 2077669 |
|  | <ul style="list-style-type: none"> Description: Mounting bracket on round body cylinder with piston diameter of 25 mm, ambient temperature min 0 °C max 50 °C Material: Plastic, Aluminum Details: Plastic, Aluminum Packing unit: 1 piece Suitable for: C-slot | BEF-KHZ-RC-25 | 2077670 |
|  | <ul style="list-style-type: none"> Description: Mounting bracket on round body cylinder with piston diameter of 20 mm, ambient temperature min 0 °C max 50 °C Material: Plastic, Aluminum Details: Plastic, Aluminum Packing unit: 1 piece Suitable for: C-slot | BEF-KHZ-RC-20 | 2077671 |
|  | <ul style="list-style-type: none"> Description: Mounting bracket on round body cylinder with piston diameter of 16 mm, ambient temperature min 0 °C max 50 °C Material: Plastic, Aluminum Details: Plastic, Aluminum Packing unit: 1 piece Suitable for: C-slot | BEF-KHZ-RC-16 | 2077672 |
|  | <ul style="list-style-type: none"> Description: Mounting bracket on round body cylinder with piston diameter of 12 mm, ambient temperature min 0 °C max 50 °C Material: Plastic, Aluminum Details: Plastic, Aluminum Packing unit: 1 piece Suitable for: C-slot | BEF-KHZ-RC-12 | 2077673 |
|  | <ul style="list-style-type: none"> Description: Mounting bracket for integrated profile cylinder/tie-rod cylinder Material: Zinc diecast Details: Zinc diecast Items supplied: Mounting hardware included | BEF-KHZ-PC1 | 2076170 |

| | Brief description | Type | part no. |
|---|--|--------------------|----------|
| connectors and cables | | | |
|  | <ul style="list-style-type: none">• Connection type head A: Female connector, M12, 4-pin, straight, A-coded• Connection type head B: Flying leads• Signal type: Sensor/actuator cable• Cable: 5 m, 4-wire, PVC• Description: Sensor/actuator cable, unshielded• Application: Uncontaminated zones, Zones with chemicals | YF2A14-050VB3XLEAX | 2096235 |

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