



MZC1-2V2PSAKR0

MZC1 VIA

SENSORS FOR C-SLOT CYLINDERS

SICK
Sensor Intelligence.



Ordering information

| Type | Part no. |
|----------------|----------|
| MZC1-2V2PSAKRO | 1079047 |

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 |
| 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) |

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⁾ Supply voltage U_B and constant ambient temperature T_a.

| | |
|---------------------------------------|---|
| Hysteresis, typ. | ≤ 0.8 mT |
| Reproducibility | ≤ 0.1 mT ¹⁾ |
| Reverse polarity protection | Yes |
| Short-circuit protection | Yes |
| Status indicator LED | 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, 0.3 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⁾ Supply voltage U_B and constant ambient temperature T_a .

Safety-related parameters

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

Communication interface

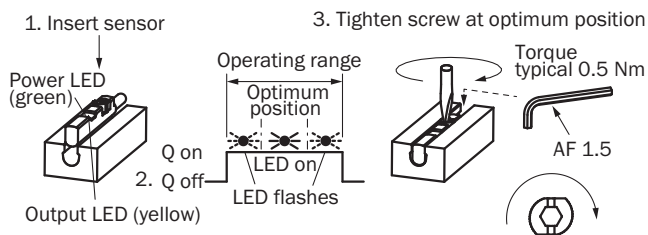
| | |
|---------------------------------------|---|
| Communication interface | IO-Link V1.0 |
| Communication Interface detail | COM2 (38,4 kBaud) |
| Cycle time | 10.4 ms |
| Process data length | 8 Bit |
| Process data structure | Bit 0 = switching signal Q_{L1} Bit 1 = switching signal Q_{L2} Bit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

Classifications

| | |
|-----------------------|----------|
| 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 |

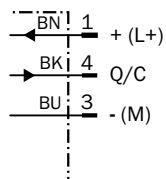
Installation note

Visual installation aid
(yellow LED)



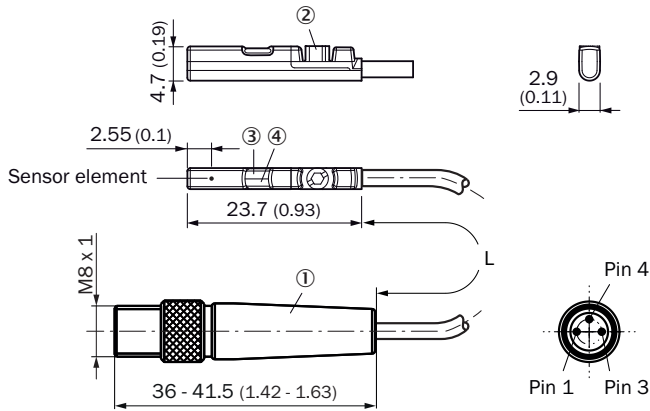
Connection diagram

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 | MZC1-2V2PSAKRO | 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 | | | |
| | <ul style="list-style-type: none"> • Connection type head A: Female connector, M8, 3-pin, straight, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 2 m, 3-wire, PVC • Description: Sensor/actuator cable, unshielded • Application: Zones with chemicals | YF8U13-020VA1XLEAX | 2095860 |
| | <ul style="list-style-type: none"> • Connection type head A: Female connector, M8, 3-pin, straight, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 5 m, 3-wire, PVC • Description: Sensor/actuator cable, unshielded • Application: Zones with chemicals | YF8U13-050VA1XLEAX | 2095884 |
| | <ul style="list-style-type: none"> • Connection type head A: Female connector, M8, 3-pin, angled, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 2 m, 3-wire, PUR, halogen-free • Description: Sensor/actuator cable, unshielded • Application: Zones with oils and lubricants, Drag chain operation, Robot | YG8U13-020UA1XLEAX | 2094794 |
| | <ul style="list-style-type: none"> • Connection type head A: Female connector, M8, 3-pin, angled, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 2 m, 3-wire, PVC • Description: Sensor/actuator cable, unshielded • Application: Zones with chemicals | YG8U13-020VA1XLEAX | 2096165 |

| | Brief description | Type | Part no. |
|---|---|--------------------|----------|
|  | <ul style="list-style-type: none"> • Connection type head A: Female connector, M8, 3-pin, angled, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 5 m, 3-wire, PUR, halogen-free • Description: Sensor/actuator cable, unshielded • Application: Zones with oils and lubricants, Drag chain operation, Robot | YG8U13-050UA1XLEAX | 2095586 |
|  | <ul style="list-style-type: none"> • Connection type head A: Female connector, M8, 3-pin, angled, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 5 m, 3-wire, PVC • Description: Sensor/actuator cable, unshielded • Application: Zones with chemicals | YG8U13-050VA1XLEAX | 2096166 |
|  | <ul style="list-style-type: none"> • Connection type head A: Female connector, M8, 3-pin, straight • 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 • Description: Unshielded • Connection systems: Solder connection • Permitted cross-section: ≤ 0.25 mm² | DOS-0803-W | 7902078 |

Recommended services

Additional services → www.sick.com/MZC1_VIA

| | Type | Part no. |
|--|------------------------|------------|
| Function Block Factory | | |
| <ul style="list-style-type: none"> • Description: The Function Block Factory supports common programmable logic controllers (PLCs) from various manufacturers, such as Siemens, Beckhoff, Rockwell Automation and B&R. More information on the FBF can be found here. • Note: You can configure your function block at Function Block Factory. As a login please use your SICK ID. | Function Block Factory | On request |

SICK AT A GLANCE

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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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