



MZ2Q-C

Cylinder sensors with two individually adjustable switching points for grippers

SICK
Sensor Intelligence.



Technical data overview

| | |
|------------------------------------|---|
| Output function | NO |
| IO-Link | - / ✓ (depending on type) |
| Teach-in | Yes |
| Special features | Special hysteresis Software V303 Housing black Special software setting Hysteresis adjustable (depending on type) |
| Cylinder types with adapter | SMC rail ECDQ2 SMC rail CDQ2 |
| Housing length | 19.5 mm |

Product description

On pneumatic cylinders, grippers, or carriages, the MZ2Q-C cylinder sensors from SICK are able to detect two end positions or intermediate positions with just one sensor. This is achieved by using two individually adjustable switching points in one sensor housing. This is much easier, quicker, and more cost-effective than conventional solutions, since only one slot is used. As a result, mounting and cabling overheads are halved and applications can be solved efficiently.

At a glance

- Can be used in all standard cylinders, linear slides, and grippers using the C-slot and – with the help of adapters – in round rod, tie-rod, and profile cylinders
- Drop-in mounting from above simplifies handling and assembly
- Easy adjustment of two switching points via teach-in pushbutton
- LEDs for indicating the two switching points
- Detection range up to 50 mm stroke

Your benefits

- One sensor, two switching points: Reduces commissioning time and costs
- Maximum flexibility thanks to a detection zone up to 50 mm
- Suitable for precise pneumatic applications due to intuitive and precise definition of two switching points
- Quick and easy installation and sensor replacement thanks to drop-in sensor mounting
- Flexible sensor settings, monitoring, advanced diagnostics and visualization through IO-Link (depending on type)

Fields of application

- End position detection in pneumatic miniature cylinders
- Position detection (open/close) in pneumatic grippers

Ordering information

Other models and accessories → www.sick.com/MZ2Q-C

- **Preferred manufacturer slot:** SMC, Bimba, Schunk
- **Output function:** NO
- **Electrical wiring:** DC 4-wire

| Connection type | Switching output | Smart Sensor | Communication interface | Type | Part no. |
|---|------------------|---|-------------------------|------------------|---------------|
| Cable with M8 male connector, 4-pin, 0.3 m | 2 x PNP | - | - | MZ2Q-CSSPSKP0 | 1042238 |
| | | | | MZ2Q-CSSPSKP0S10 | 1061383 |
| Cable with connector M12, 4-pin, with knurled nuts, 0.3 m | 2 x PNP | - | - | MZ2Q-CSSPSKQ0 | 1042240 |
| | | Enhanced Sensing, efficient communication | IO-Link | MZ2Q-CSLPSKQ0 | 1043696 |
| Cable with connector M8, 4-pin, with knurled nuts, 0.3 m | 2 x PNP | | | IO-Link | MZ2Q-CSLPSKR0 |
| Cable with connector M8, 4-pin, with knurled nuts, 0.5 m | 2 x NPN | - | - | MZ2Q-CSSNSKR0S21 | 1096578 |
| | 2 x PNP | - | - | MZ2Q-CSSPSKR0 | 1042239 |
| | | | | MZ2Q-CSSPSKR0S01 | 1044557 |
| | | | | MZ2Q-CSSPSKR0S20 | 1095814 |
| | | | | MZ2Q-CSSPSKR0S22 | 1118101 |
| MZ2Q-CSSPSKR0S25 | 1147171 | | | | |
| Cable, 4-wire, 2 m | 2 x PNP | - | - | MZ2Q-CSSPSKU0 | 1042237 |
| Cable, 4-wire, 3 m | 2 x NPN | - | - | MZ2Q-CSSNSKUA | 1046234 |
| | 2 x PNP | - | - | MZ2Q-CSSPSKUAS05 | 1051588 |

- **Preferred manufacturer slot:** Festo
- **Switching output:** 2 x PNP
- **Output function:** NO
- **Electrical wiring:** DC 4-wire

| Connection type | Smart Sensor | Communication interface | Type | Part no. |
|---|---|-------------------------|------------------|---------------|
| Cable with M8 male connector, 4-pin, 0.3 m | - | - | MZ2Q-CFSPSPK0 | 1042242 |
| | | | MZ2Q-CFSPSPK0S04 | 1051025 |
| Cable with connector M12, 4-pin, with knurled nuts, 0.3 m | - | - | MZ2Q-CFSPSKQ0 | 1042244 |
| | Enhanced Sensing, efficient communication | IO-Link | MZ2Q-CFLPSKQ0 | 1043697 |
| Cable with connector M8, 4-pin, with knurled nut, 0.3 m | | | IO-Link | MZ2Q-CFLPSKR0 |
| Cable with connector M8, 4-pin, with knurled nuts, 0.5 m | - | - | MZ2Q-CFSPSKR0 | 1042243 |
| Cable, 4-wire, 2 m | - | - | MZ2Q-CFSPSKU0 | 1042241 |
| | Enhanced Sensing, efficient communication | IO-Link | MZ2Q-CFLPSKU0 | 1115196 |

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.”

WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com