

## MZR401F9

### Magnetic field sensors • Sensors for C-slot

sensor magnetic, cylinder, 4.1mm rounded groove, Ø4mm 20long, 10-30V DC, 1x PNP NO, Cable connector M8 3pin 0.6m PUR (Polyurethane), IP67, Stainless steel 1.4305, LED, 6mT, mounting Lateral, Sensor surface position Border area of the device



For many tasks in the field of automation technology, it is necessary to recognize the motional processes in pneumatic and hydraulic cylinders and to detect the position of the piston with precision. For this, magnetic cylinder sensors are used.

#### Electrical features

|                               |                            |
|-------------------------------|----------------------------|
| Number of switching outputs   | 1                          |
| Display                       | LED display                |
| Type of switching function    | Normally open contact (NO) |
| Type of electrical connection | Cable connector M8         |
| Type of switching output      | PNP                        |
| Rated switching current       | 150 mA                     |
| Absolute hysteresis           | 1 mm                       |
| Short-circuit protection      | Yes                        |
| No-load current               | 10 mA                      |
| Magnetic sensitivity          | 6 mT                       |
| Number of pins                | 3                          |
| Switching frequency           | 1000 Hz                    |
| Sensor surface (active)       | Border area / edge area    |
| Voltage drop                  | 2 V                        |
| Reverse polarity protection   | Yes                        |
| Absolute repeat accuracy      | 0.1 mm                     |
| Operating voltage (DC)        | 10 - 30 V                  |

## Mechanical features

|                                  |                                                 |
|----------------------------------|-------------------------------------------------|
| Design                           | Cylinder plain                                  |
| Diameter                         | 4 mm                                            |
| Cable length                     | 0.6 m                                           |
| Sensor surface position          | Device edge area below the light emitting diode |
| Length                           | 20.5 mm                                         |
| Mounting access, cylinder groove | Lateral                                         |
| Degree of protection (IP)        | IP67                                            |
| Housing material                 | Stainless steel 1.4305                          |
| Material of cable sheath         | Plastic (PUR)                                   |
| Strong vibration / motion        | Yes                                             |
| Ambient temperature              | -25 - 70 °C                                     |

## Other features

|                                |                             |
|--------------------------------|-----------------------------|
| Suitable for                   | 4.1mm C-slot (round groove) |
| Cylinder manufacturer          | SMC                         |
| Harsh environmental conditions | Yes                         |
| Oil and cooling lubricants     | Yes                         |

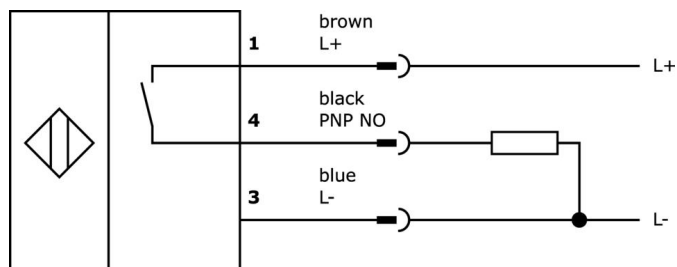
## Classification

|        |                                    |
|--------|------------------------------------|
| ETIM 8 | EC002544 Magnetic proximity switch |
|--------|------------------------------------|

## More

|                       |                                |
|-----------------------|--------------------------------|
| IPF Product Group     | 220 pneumatic cylinder sensors |
| packaging dimensions  | 120 x 100 x 17 mm              |
| gross weight          | 20 g                           |
| Customs tariff number | 85365019                       |
| WEEE number           | 40951076                       |
| Reach-compliant       | Yes                            |
| RoHS-compliant        | Yes                            |

## Connection



## Extract accessories program

### VK003070



Cable socket, Angular, Suitable for self-assembly, Soldering connection, Ø3.5-5mm, 4A, 60V, -40-85°C, M8 Female (socket) 3pin, IP67, Brass

### VK003074



Cable socket, Straight, Suitable for self-assembly, Soldering connection, Ø3.5-5mm, 4A, 60V, -40-85°C, M8 Female (socket) 3pin, IP67, Brass

### AY98C293



accessories sensor, Teflon cap, M8x1 5 long, Polytetrafluorethylene (PTFE)

### AM000080



accessories magnetic, Internal hexagon, 10x30mm, wrench size 0.9mm, VA, Packaging unit 10

### VK200071



Connection cable, 2m, M8 Female (socket) 3pin Angular, Free conductor end, 3x0.34mm², PUR (Polyurethane), Ø4.3mm, 60V, -40-90°C, IP67, TPU, Suitable for trailing chain and torsion resistant, Oil and cooling lubricants, Welding area, Silicone-free

### VK200075



Connection cable, 2m, M8 female (socket) 3pin Straight, free conductor end, 3x0.34mm², PUR (Polyurethane), Ø4.3mm, 60V, -30-90°C, IP67, suitable for trailing chain and torsion resistant, oil and cooling lubricants, welding area, Silicone-free

### VK200271



Connection cable, 2m, M8 Female (socket) 3pin Angular, Free conductor end, 3x0.34mm², PUR (Polyurethane), Ø4.3mm, -30-90°C, IP67, With LED display, Suitable for trailing chain and torsion resistant, Oil and cooling lubricants, Welding area, Silicone-free

### VK500271



Connection cable, 5m, M8 Female (socket) 3pin Angular, Free conductor end 3pin, 3x0.34mm², PUR (Polyurethane), Ø4.3mm, -30-90°C, IP67, With LED display, Suitable for trailing chain and torsion resistant, Oil and cooling lubricants, Welding area, Silicone-free

### VK030F70



Connection cable, 0.3m, M8 socket 3-pin angular, M8 connector 3-pin straight, 3x0.34mm², PUR (polyurethane), 60V, IP67, suitable for trailing chain and torsion resistant, oils and cooling lubricants, welding area, silicone-free

You can find further accessories on our homepage



### Installation

Mounting / installation may only be carried out by a qualified electrician!



### Disposal

WEEE number according to § 6 para. 3 ElektroG: 40951076

## Safety warnings

/ Before initial operation, please make sure to follow all safety instructions that may be provided in the product information.

/ Never use these devices in applications where the safety of a person depends on their functionality.