

## MZ07E177

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

sensor magnetic, cylinder, 6.2mm T-groove, 6,3x20x5,2mm, 10-30V DC, 1x PNP NO, Cable connector M8 3pin 0.3m PUR (Polyurethane), IP67, Aluminum, LED, 2.8mT, mounting Lateral, Sensor surface position Center 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          | 2.8 mT                     |
| Number of pins                | 3                          |
| Switching frequency           | 1000 Hz                    |
| Sensor surface (active)       | Middle area                |
| Voltage drop                  | 2 V                        |
| Reverse polarity protection   | Yes                        |
| Absolute repeat accuracy      | 0.1 mm                     |
| Operating voltage (DC)        | 10 - 30 V                  |

**Mechanical features**

|                                  |                      |
|----------------------------------|----------------------|
| Number of cores                  | 3                    |
| Conductor cross-section          | 0.14 mm <sup>2</sup> |
| Design                           | Cuboid               |
| Width                            | 5.2 mm               |
| Height                           | 6.3 mm               |
| Cable length                     | 0.3 m                |
| Sensor surface position          | Center of the device |
| Length                           | 20 mm                |
| Mounting access, cylinder groove | Lateral              |
| Degree of protection (IP)        | IP67                 |
| Housing material                 | Aluminum             |
| Material of cable sheath         | Plastic (PUR)        |
| Strong vibration / motion        | Yes                  |
| Ambient temperature              | -25 - 70 °C          |

**Other features**

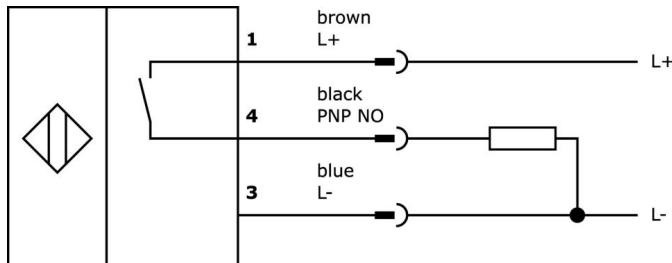
|                                |               |
|--------------------------------|---------------|
| Suitable for                   | 6.2mm T-slot  |
| Cylinder version               | With T-groove |
| Harsh environmental conditions | Yes           |
| Oil and cooling lubricants     | Yes           |

**Classification**

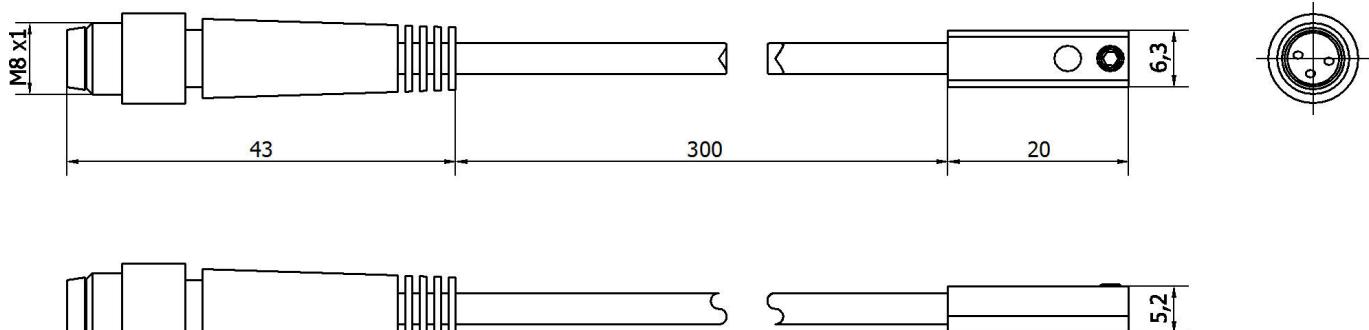
|        |                                    |
|--------|------------------------------------|
| ETIM 8 | EC002544 Magnetic proximity switch |
|--------|------------------------------------|

**More**

|                       |                                |
|-----------------------|--------------------------------|
| IPF Product Group     | 220 pneumatic cylinder sensors |
| packaging dimensions  | 120 x 100 x 15 mm              |
| gross weight          | 17 g                           |
| Customs tariff number | 85365019                       |
| WEEE number           | 40951076                       |
| Reach-compliant       | Yes                            |
| RoHS-compliant        | Yes                            |

**Connection**

## Dimensional drawing



## Extract accessories program

## AM0000087



accessories magnetic, Cable clip,  
Plastic

## 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

## AM98E153



accessories magnetic, Installation  
tape, 259x9,5mm, Span 35-68mm,  
For sensor MZ07, Stainless steel

## VK200271



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

## VK500271



Connection cable, 5m, M8 Female  
(socket) 3pin Angular, Free  
conductor end 3pin, 3x0.34mm<sup>2</sup>,  
PUR (Polyurethane), Ø4.3mm, -30-  
90°C, IP67, With LED display,  
Suitable for trailing chain and  
torsion resistant, Oil and cooling  
lubricants, Welding area, S...

## VK030F80



Connection cable, 0.3m, M8  
socket 3-pin angular, M12  
connector 3-pin straight, 3x0.  
34mm<sup>2</sup>, PUR (polyurethane), 60V,  
IP67, suitable for trailing chain and  
torsion resistant, oils and cooling  
lubricants, welding area, silicone-  
free

## VK030F84



Connection cable, 0.3m, M8  
socket 3-pin straight, M12  
connector 3-pin straight, 3x0.  
34mm<sup>2</sup>, PUR (polyurethane), 60V,  
IP67, suitable for trailing chain and  
torsion resistant, oils and cooling  
lubricants, welding area, silicone-  
free

## VK200071



Connection cable, 2m, M8 Female  
(socket) 3pin Angular, Free  
conductor end, 3x0.34mm<sup>2</sup>, 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

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

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

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