

## MZR40178

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

Sensor Magnetic, cylinder, 3.75mm round groove, Ø3.6mm 20long, 10-30V DC, 1x PNP NO, M8 cable connector 3-pin 0.3m PUR (polyurethane), IP67, stainl. steel, LED, 2.8mT, lateral installation, position of sensor surface at the edge 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)	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**

Number of cores	3
Design	Cylinder plain
Diameter	3.6 mm
Cable length	0.3 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	3.5mm C-slot (round groove)
Cylinder manufacturer	Festo
Harsh environmental conditions	Yes
Oil and cooling lubricants	Yes

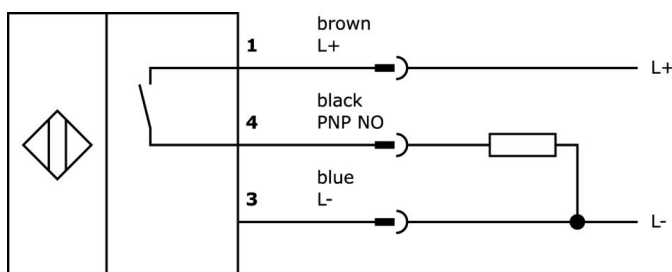
**Classification**

ETIM 8	EC002544 Magnetic proximity switch
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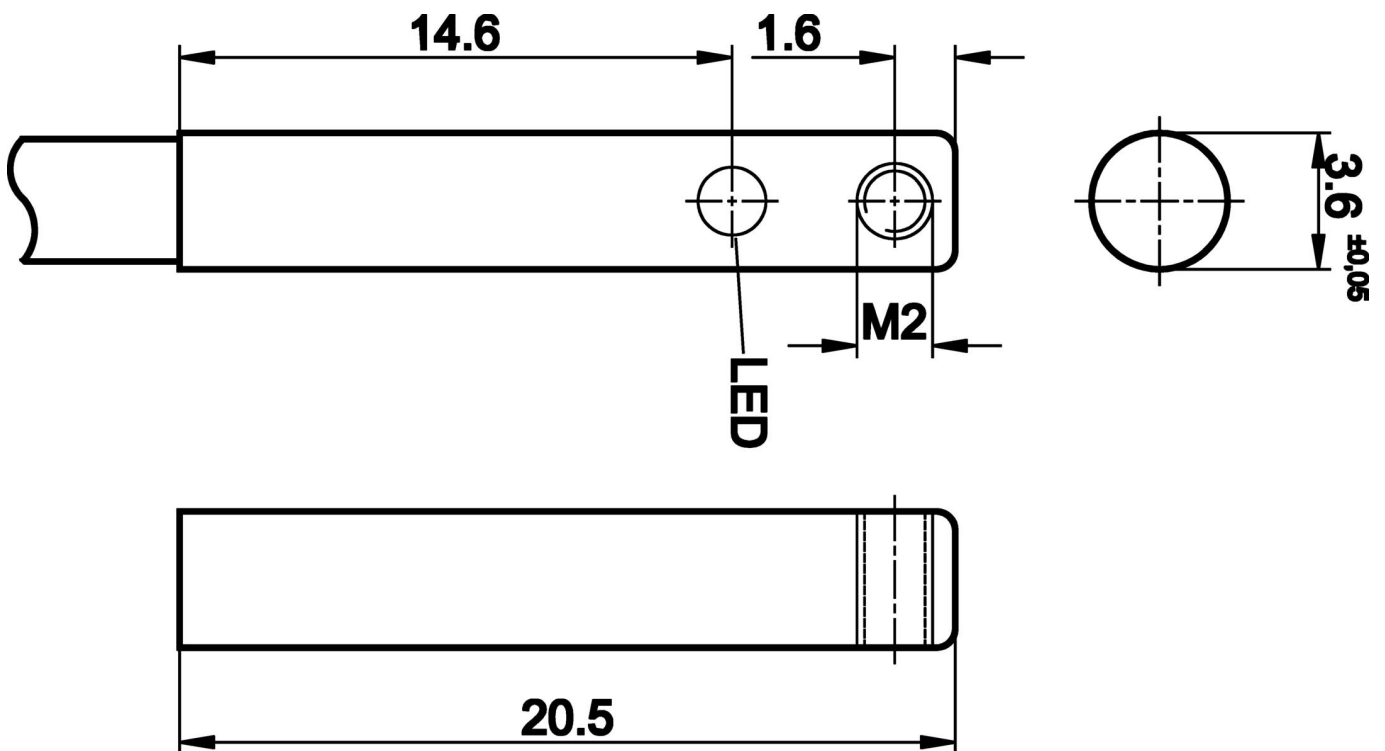
**More**

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**



**Dimensional drawing**



**Extract accessories program**

**AM000080**



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

**AY98C293**



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

**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

**VK200075**



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

**VK030F74**



Connection cable, 0.3m, M8 socket 3-pin straight, M8 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

**VK030F72**



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

**VK060F72**



Connection cable, 0.6m, M8 socket 3-pin angular, M8 connector 3-pin straight, 3x0.34mm<sup>2</sup>, PUR (polyurethane), IP67, LED, suitable for trailing chain and torsion resistant, oils and cooling lubricants, welding area, silicone-free

**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

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.