

## MZA70176

### MAGNETIC SENSORS • SENSORS FOR PNEUMATIC CYLINDERS

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.



#### MECHANICAL FEATURES

Ambient temperature	-25 °C ... 70 °C
Cable length	0.3 m
Degree of protection (IP)	IP67
Housing design	Cuboid
Housing material	Zinc die-cast
Increased ambient temperatures > 80°C	No
Material of cable sheath	PUR (Polyurethane)
Max. tightening torque	0.1 Nm
Metal housing	Yes
Mounting access, cylinder groove	From the top
Sensor height	4.3 mm
Sensor length	19 mm
Sensor surface position	Center of the device
Sensor width	6.15 mm
Strong vibration / motion	Yes
Version	6.2mm T-groove

#### ELECTRICAL FEATURES

Cross/short circuit identification possible	No
Hysteresis	1 mm
Low sensitivity	No
Low switching hysteresis	Yes
Magnetic sensitivity	2.8 mT
Max. output current	150 mA
No-load current	15 mA
Number of pins	3
Number of switching outputs	1
Operating voltage	10 V ... 30 V
Reed contact	No
Relative repeat accuracy	0.1 mm
Reverse polarity protection	Yes
Sensor surface (active)	Middle area
Setting via teach-in	No

## ELECTRICAL FEATURES

Short-circuit protection	Yes
Suitable for safety functions	No
Switching frequency	1000 Hz
Two switching points	No
Type of electrical connection	Cable connector M8
Type of switching function	Normally open contact
Type of switching output	PNP
Voltage drop	2 V
Voltage type	DC
With LED display	Yes
With monitoring function of downstream devices	No

## OTHER FEATURES

Cylinder sensors	Yes
Cylinder version	With T-groove
Harsh environmental conditions	Yes
Metallic sensor surface	No
Oil and cooling lubricants	Yes
Short travel path	No

## Other

Packaging dimensions	100mm x 17.0mm x 120mm
Shipping weight	
Article number	85365019

## Classification

ipf product group	220
eClass 8.0	27270105
eClass 9.0	27270105
eClass 9.1	27270105
ETIM-5.0	EC002544
ETIM-6.0	EC002544
ETIM-7.0	EC002544

## Connection

## Dimensional drawing

### Installation



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

### Disposal



## Software

Please download the software or driver required for operating your new device on our homepage: [www.ipf.de](http://www.ipf.de)

## 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.