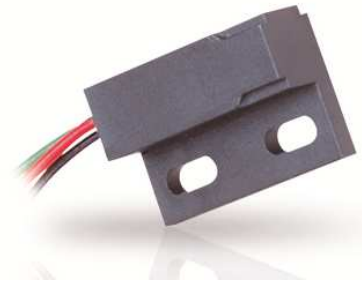


# Magnetic Proximity Sensors (Reed)

## MP2019 Sensors

Reed based magnetic proximity sensor  
in plastic flange-mount package



### Description

The MP2 Series sensors are reed position sensors. Normally open or closed contacts change states when a magnetic field is applied. The sensors act as non-latching electrical switches.

### Features

- Contacts hermetically sealed for long life
- Zero power consumption
- Suitable for DC and AC circuits
- Flange mount
- RoHS compliant
- IP65
- Operate/Release Distances\*: 10.16 mm – 22.86 mm (0.4" – 0.9")

### Typical Applications

- Door position & interlock
- Limit switch
- Flow/speed
- Home security
- Pedal switch

### Environmental Specifications

Vibration	20 g 10 Hz to 1 kHz (MP201901), 20 g 10 Hz to 55 Hz (MP201902, M201903)
Operating Temperature	-40 °C to 105 °C (-40 °F to 221 °F)
Storage Temperature	-40 °C to 105 °C (-40 °F to 221 °F)
Ingress Protection	IP65

### Electrical Specifications

Typical Operating Time	1 ms
Breakdown Voltage	200 VDC min.
Switching Voltage and Current	See Products chart
Contact Resistance and Power rating:	See Products chart

### Mechanical Specifications

Housing Material	Glass-reinforced plastic
Operate/Release Distances*	10.16 mm – 22.86 mm (0.4" – 0.9")
*with AS201901 magnetic actuator	

### Products

Part Number	Contact Form	Maximum Power Rating	Maximum Switching Voltage	Maximum Switching Current	Maximum Contact Resistance
MP201901	SPST-NO Form A	10 W	175 VAC/VDC	0.5 A	0.200 Ω
MP201902	SPST-NC Form B	3 W	30 VAC/VDC	0.2 A	0.100 Ω
MP201903	SPDT-CO Form C	3 W	30 VAC/VDC	0.2 A	0.100 Ω

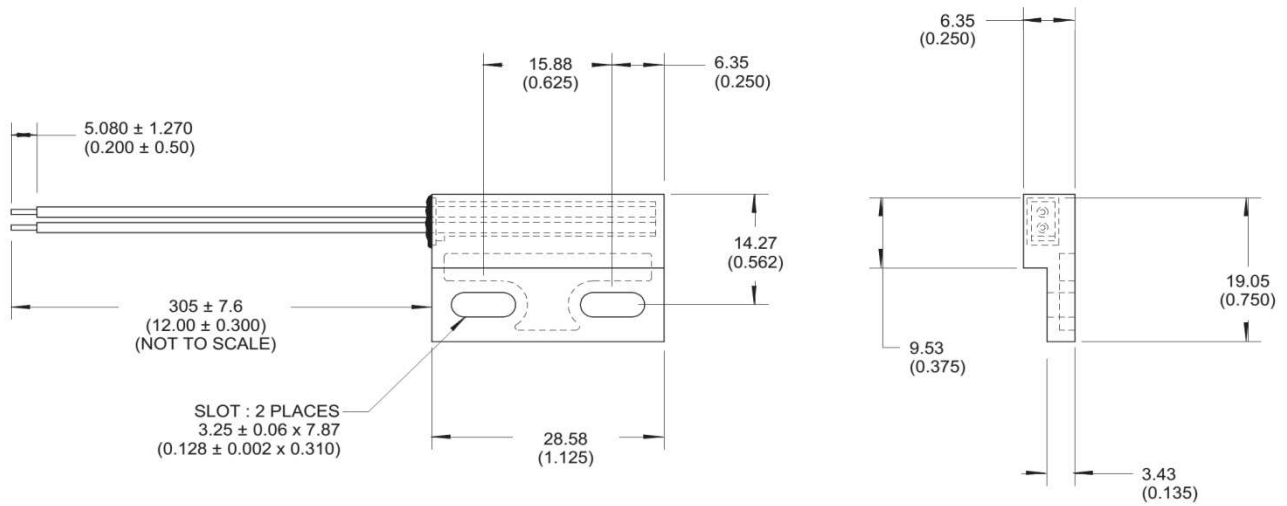
All MP2019 sensors come with leads 24 AWG x 305 mm (12")

[www.switches-sensors.zf.com](http://www.switches-sensors.zf.com) ZF Electronics Systems Pleasant Prairie, LLC ("ZF") acquired the rights to the CHERRY branded switches and sensors in 2008. Although ZF divested its interest in the CHERRY name in 2015, the switches and sensors remain unchanged and are now sold under the ZF brand.

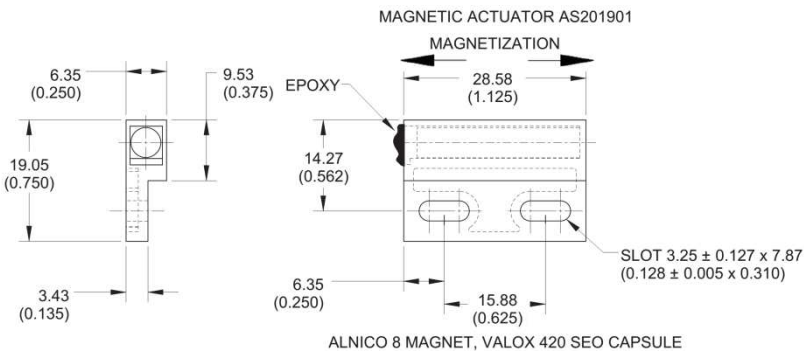
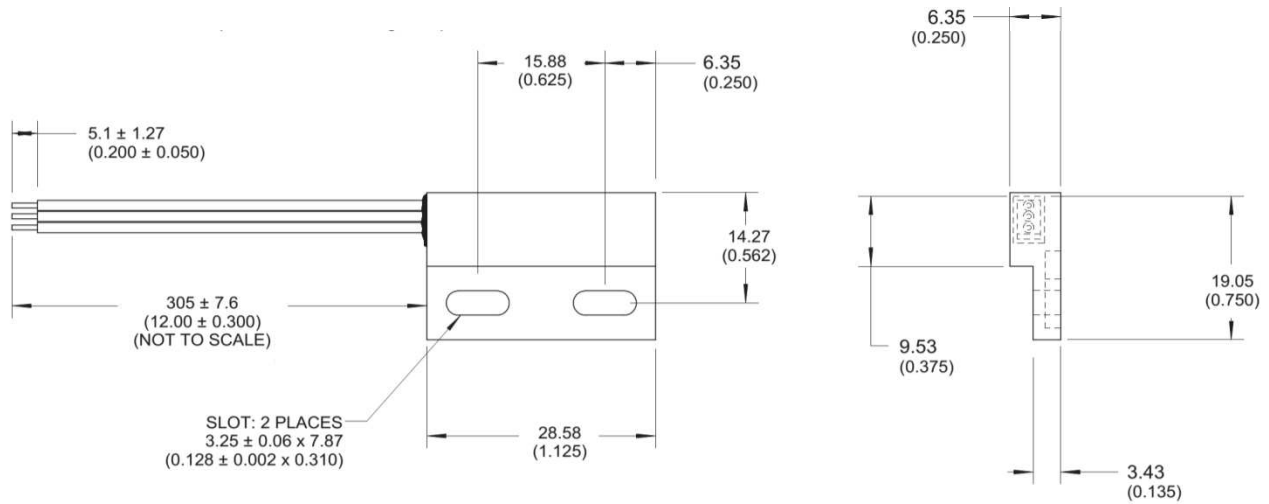


# Dimensions mm (inches)

MP201901 (Form A - N.O.) and MP201902 (Form B - N.C.)

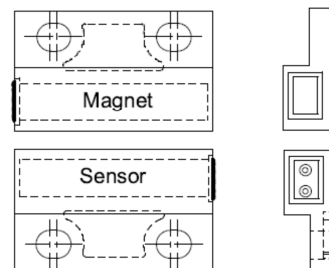


MP201903 (Form C - SPDT Changeover)



Wire designations	
BLACK	NO
BLUE	NC
BROWN	COMMON

### Alignment for Best Performance



[www.switches-sensors.zf.com](http://www.switches-sensors.zf.com) ZF Electronics Systems Pleasant Prairie, LLC ("ZF") acquired the rights to the CHERRY branded switches and sensors in 2008. Although ZF divested its interest in the CHERRY name in 2015, the switches and sensors remain unchanged and are now sold under the ZF brand.

