

Magnetic Contacts

Magnetic contacts are divided into two series, the strong electric 220V and the weak electric 12V-24V Magnetic contacts. Magnetic contact consists of two parts, the switching section for wiring side (lead or terminal), There is a normally open switch or conversion type of reed inside the switch. Another part is the magnet side (with ferrite or NdFeB). When the door sensor is in working condition, the permanent magnets generate a constant magnetic field and will pull reed contacts, which will output switching signal (path alarm circuit alarm) for alarm systems. According to the doors' and windows' materials or ways of installation, We will choose product's shell material, operating distance and so on.

Magnetic contacts' Selection

1.1 Selected according to installation

- ♦ Mounted: Mounted Wooden Magnetic and metal magnetic contacts are attached with mounting screws when leaving the factory, window magnetic contacts attached with double-sided adhesive generally.
- ♦ Embedded: Drilling installation wooden magnetic and metal door magnetic installation is generally cylindrical, the factory did not match the mounting screws.
- ♦ Buried: Buried shutter door magnetic contacts generally are suitable for garage and shutter doors of shops installation.
- ♦ Upper type: upper type generally is used in Southeast Asia's guests' garage and shop shutter door sensor.

1.2 Selected according to alarm way

- ♦ **NC- normally closed / break alarm**
(GB GB16209-2006 named for moving off type)

The working theory of normally closed door magnetic contacts: After Doors and windows normally closed arm, the permanent magnet is near the switch, then switch signal keeps pathway state; once the door is opened illegally, then the permanent magnet stays away from the switch, the switch signal is off to trigger the alarm. Normally closed mag-

netic contact is economical and practical, it's also most of the engineering's design and selection. If not specified, the default is normally closed magnetic constantly.

(Note: If the normally closed magnetic used in automation and control equipment, it is generally called normally open magnetic switch.)

- ♦ **NO- normally open / path alarm**

The working theory of normally open magnetic contact: When the doors close and arm properly, the permanent magnet is near the switch, and the switch signal is off; once the door is opened illegally, then the magnet is away from the switch, the switch signal recovers path status for triggering the alarm.

- ♦ **NC & NO- normally open and normally closed / conversion type**

Normally open and normally closed door sensor's features: three signal lines (or terminals), one for the common line COM, a normally open line of NO, a normally closed line NC. You can select the way of the magnetic alarm's signal output according to the way of Magnetic Alarm the host needed. Normally open and normally closed door magnetic contacts use the transformational reed.

2.0 Magnetic load

- ◆ General normally closed magnetic contact's maximum switching voltage/current/power is 100VDC/0.5A/10W;
- ◆ General normally open and conversion type door magnetic. Maximum switching voltage/current/power is 30VDC/0.2A/3W;
- ◆ Strong electric door magnetic: 110V-220V, 50W, 0.5A;
- ◆ The load which is through the magnetic contacts should not exceed the value of factory calibration, or the switch will be broken down.

3.0 Magnetic contact installation instructions

- ◆ Doors and windows contacts should be installed in the top of the door or window, which is not easy to be touched. The permanent magnet part should be m-

ounted on the movable doors and windows. Switch part is mounted on the stationary part of the door frame. Switch section and Magnet section are installed and aligned.

- ◆ Try a good bit, otherwise the magnetic field lines optimal conduction zone and reed contacts deviate will shorten the sensor distance.
- ◆ Serious installation Dislocation will make the switch not sense the magnetic field attraction to cause a failure switch.
- ◆ Before drilling, you'd better use the track number pen to set bits. Door magnetic contacts must be away from transformers and the place of strong magnetic. Otherwise the properties of Magnetic contact's work will be changed and it is possible to be a malfunctions.

Nine required precautions when using Magnetic Switch

- ◆ When the magnetic switch is mounted, we can't make the switch suffer excessive impact force.
- ◆ To avoid using magnetic switch around a strong magnetic field and a large current environment.
- ◆ Do not put the power cord and wire together.
- ◆ When wiring, wire shouldn't be stood tensile and bending forces. For robotic and other moving parts occasion, using wire having a resistance to bending properties in order to avoid switch damaged or broken.
- ◆ The wire of the magnetic switch is not directly connected to the power supply, the load must be connected in series.
- ◆ The maximum load voltage and load current don't exceed the maximum allowable capacity of magnetic switch, otherwise its life will be greatly reduced.
- ◆ The reed switch with indicator light, when the current exceeds the maximum current, light-emitting diodes will be damaged; if the current is below the predetermined range, the LED will be dim or not light.
- ◆ The DC should be divided into positive and negative points, if the wire is reversed, the switch can be moved, but the light is not bright.
- ◆ The magnetic switch isn't suitable for using in water or corrant environment. If needed in such an environment, the lid can be used to block the