

# Cautions in Using The Solenoids

In using the solenoid, there may be accidents of incompatibility that can not be thought on the desk, and from the aspect of reliability also please check the quality in actual use state.

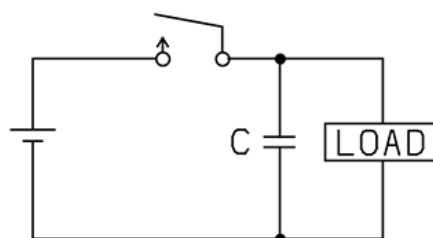
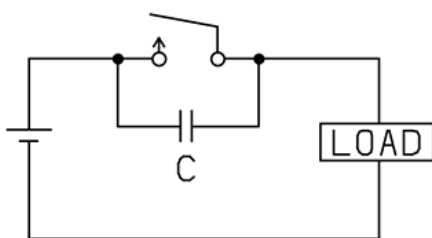
## 1. General handling

- a) Please take care so as not to give a big shock to maintain initial characteristics.
- b) Please absolutely avoid using with voltage and current over the standard.
- c) When the rated range of use is regulated, please use within the standard.
- d) Please note the polarity of the coil (+ -) for those with polarity specification.
- e) Please avoid using the ambient temperature outside the standard.

## 2. Protection of contacts

Sparks may occur at the contacts for control that operate the DC solenoid, causing wear of the contacts, noise disturbance, etc. Therefore, we recommend inserting a protection circuit suitable for each application.

## Circuit example



## 3. Electric corrosion of the coil

In a high temperature and high humidity atmosphere, when using the case to earth connection, depending on the connection method, it may be disconnected by electrolytic corrosion so please note the following points.

- a) Please ground the + side of the power supply.
- b) If the + side of the power supply can not be grounded, or if it is unavoidable to ground the - side of the power supply, switch on the + side of the power supply and set the coil to the - side.
- c) Please avoid ground the - side of the power supply and do not insert the switch on the - side.

#### 4. Storage

The storage warranty period for the solenoid is 6 months in unopened condition. Please store it in an environment with a temperature of 10 to 35°C, a relative humidity of 20 to 80%, no condensation, and away from direct sunlight. Please use immediately after opening the packaging. If storage is necessary after opening the packaging, please take appropriate measures to prevent moisture and gas, such as sealing the product in a plastic bag, and store it in an environment with a temperature of 10 to 28° C and a humidity of 20 to 80% RH, away from sources of sulfur gas (cardboard, rubber products, etc.), and use it within 3 days. Please note that long-term storage in a high temperature and humid environment may cause the silver-plated terminals to oxidize and a sulfide film to form, which may reduce solderability, and may also cause oxidation and rust of metal parts.