■ HC series current sensors

1) When the frequency of the input current is high, the core generates an unusual amount of heat due to core loss, and this heat may damage the internal circuits. The amount of heat generated is influenced by the frequency and amount of the input current and differs depending on the type of sensor, so check the performance on the actual machine.
   We are able to produce heat generation countermeasure products which use different core materials. Please consult us for the details.
2) Since the output varies depending on the size of the load resistance, use with the specified resistance. (The size of the load resistance can be specified by the user.)

■ HS series current sensors

1) Use a resistance which has good accuracy and temperature characteristics for the load resistance which is connected to current output type sensors.
2) Prepare a control power supply the capacity of which is at least twice the rated output current.
3) If the connector is inserted or removed while the control power is being applied, residual magnetism may occur in the core due to the terminal contact timing becoming out of sequence, and the residual voltage may be affected. In addition to turning the power supply on and off while the connector is connected, ensure that the + side and – side of the power supply are matched.
4) In inputting current above rating, note that some models specify energization time.
   If the product is used in excess of this time, internal circuit may fail.
5) When current exceeding saturation current is input, magnet compensation will not work, and residual output will cause displacement, therefore, use the product always at current below saturation current.
6) Demagnetize the sensors without applying electric power.

■ Common instructions for both series

1) Erroneous connection of the control terminals will cause the internal circuits to be instantaneously destroyed. Pay sufficient attention to the connection.
2) If static electricity or surge voltage is applied, the residual voltage may be increased.
3) In addition to making the control wiring as short as possible to protect it from outside noise, use twisted wire or shielding wire.
4) Connect a capacitor of approximately 0.1μF between the control power supply and GND.
5) Attach PCB mounting type current sensors firmly to the installation board so that they are not separated from it by more than 0.5mm. Furthermore, perform the soldering under the following conditions.
   Flow solder : Solder temperature approx. 250°C, within 5 seconds
   Hand solder: Solder temperature approx. 280~300°C, within 3 seconds
   <Pb-free> Flow solder : Solder temperature approx. 260°C, within 5 seconds
   Hand solder: Solder temperature approx. 340°C, within 4 seconds
6) The current sensor may be corroded under corrosive gas atmosphere. Make sufficient confirmation under actual service environmental conditions before use.
7) Do not store the sensors in hot or humid environments.