



Safety precautions for the electric actuator

Warning and Cautions

Always read this section before starting use.

Refer here for the detailed precautions of each series.

This device fulfills the industrial robot specifications provided in Article 36, Item 31 of the Industrial Safety and Health Regulations. Necessary information can be found in the sections on selection, installation, use, periodic inspection, and education in the Technical Guidelines for Safety Standards During Industrial Robot Use, based on Article 28 of the Industrial Safety and Health Act. Carefully read this information before use and be sure to observe it. Also be sure to carefully read the instruction manual before use.



DANGER

Design/selection

- 1 Do not operate in flammable or explosive environments.



WARNING

Design/selection

- 1 Use this product in accordance with the specifications range.
- 2 Install a protective cover in case of possible danger to the operator.
 - If the electric actuator's movable portions pose possible danger to the operator, be sure that the actuator has a structure preventing the operator from entering its operation range or touching the movable portions directly.
 - Do not get close to the robot if you wear a medical device such as pacemaker. Strong magnets used in the robot may cause misoperation of pacemakers and other devices.
- 3 Take possibility of power source failure into consideration.
 - In case of a failure in the power source, take countermeasures without causing trouble or damage to the operator or equipment.
- 4 Take the operational status into consideration in emergency stop.
 - Design the structure so that damage from electric actuator operation does not occur to the operator, machine, or equipment during emergency stop, or when the machine stops due to safety devices operating in the event of power failure or other abnormal system conditions.
- 5 Take the operational status into consideration if the machine is reactivated after emergency stop or abnormal stop.
 - The machine must be designed so that reactivation causes no damage to the operator or equipment.
 - If the electric actuator must be reset to the start position, be sure to provide the machine with a safe control device.
- 6 Install this product in a place that avoids rain, water, or direct sunlight.
- 7 Do not operate in corrosive environments.
 - Environments such as these may lead to damage or misoperation.
- 8 Do not operate in places where vibration and impact are common.
- 9 Do not operate in places with high levels of dust or where it is likely to come in contact with water and oil drops.
- 10 Do not apply a load to the product that is greater than or equal to the allowable load listed in the materials for selection.



CAUTION

Design/selection

- 1 Do not hit the trolley table against the stroke end.
- 2 Specify the maintenance conditions in the equipment instruction manual.
 - Product functions may deteriorate significantly due to usage, working environment, or maintenance. This may result in failure to ensure safety. With correct maintenance, the product functions can be used to the fullest.
- 3 Read the instruction manual carefully to perform installation and adjustment properly.
- 4 The product is manufactured in conformity with the related standards. Do not attempt to modify the product.



CAUTION

During Use & maintenance

- 1 Read the instruction manual carefully before use.
- 2 In the case of any abnormalities, stop use immediately and contact the CKD sales office nearest you.



CAUTION

Exporting

- 1 Regarding exports
 - 1 When incorporated into equipment, be sure to adhere to the standards of that equipment.