**X axis (XY axis) - V-teeth Lead Screw Design**

- **Material**
  - Aluminum alloy
  - Stainless steel

- **Guiding**
  - Crossed-roller
  - Linear ball

- **Drive type**
  - V-teeth lead screw

**Table Size and Load Capacity**

<table>
<thead>
<tr>
<th>Table Size (mm)</th>
<th>Load Capacity (Kgf)</th>
<th>Travel Stroke (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>40-120</td>
<td>6-25</td>
<td>15-70</td>
</tr>
<tr>
<td>40-150</td>
<td>10-14</td>
<td>20-80</td>
</tr>
<tr>
<td>50-200</td>
<td>10-14</td>
<td>30-100</td>
</tr>
<tr>
<td>60-250</td>
<td>10-14</td>
<td>40-150</td>
</tr>
</tbody>
</table>

**Repeatability Accuracy**

- ±2 μm

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**Unpacking Precautions**

- Before unpacking, check the appearance for damage, loose screws and loose components. If there are concerns about structure and appearance, please take photos as evidence and E-mail them to the responsible business unit.

- When the shipment arrives, make sure that the specifications and contents are consistent with the order, and check whether any peripheral parts are missing.

- For any questions, please contact the original business unit.

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**Safety Precautions**

- Before placement and use, make sure that there is sufficient working space around to prevent the danger of falling and rolling.
  - **CAUTION:** Violation may result in personal injury or product damage.

- For installation and operation, please follow electrical safety instructions. Do not use in explosive atmosphere, flammable environment, corrosive environment, easily wet and humid environment or near flammable materials. Otherwise, there is risk of fire, electric shock and injury.
  - **CAUTION:** Violation may result in serious personal injury or product damage.

- In operation, please check if there is enough movement space around the motor and mechanism to prevent any part of the body and clothing accessories from entering the stage or coming close to the working range of stage or any danger of rolling, pinching or pulling.
  - **CAUTION:** Violation may result in personal injury or product damage.

- When the product is used in the vertical direction of Z axis, please use safety device for prevention (natural slide or power interruption due to overload).
  - **CAUTION:** Violation may result in personal injury or product damage.
Installation Precautions

When abnormal issue (such as abnormal sound, abnormal vibration) arises, please immediately stop the machine.

→ CAUTION: Violation may result in personal injury or product damage.

Do not forcibly pull or bend any electric wires and follow the wiring diagram for correct wiring.

→ CAUTION: Violation may result in personal injury or product damage.

When tightening screws, please torque wrench according to the specifications of screws.

→ CAUTION: Violation may cause loosening.

Please do not allow mechanical setting over maximum speed to cause mechanical instability (avoiding extreme change of setting or parameters).

→ CAUTION: Violation may result in personal injury or product damage.

When malfunction or damage arises, please do not continue the use.

→ CAUTION: Violation may result in personal injury or product damage.

Make sure wiring and connection of electric equipment is secured. Make sure parameter setting is correct.

→ CAUTION: Violation may cause fire, electric shock, personal injury or product damage.

Foreign object such as dust, metal powder entering screw or slide rail may reduce life and cause excess wear.

→ If concerns exist, please implement dust prevention measures.

If the product is used as mechanical processing standard, it may affect life, performance and precision.

→ If the situation exists, please have installation on the base with reliable rigidity.

The product is designed and planned according to the direction specified in the catalog. Please check with GMT if other direction is used.

→ If the direction is other than horizontal direction, it will reduce life and increase probability of malfunction.

Before installation of our product, please make sure that the installation surface has no unnecessary object, and use alcohol to clean and prevent loss of installation precision.

→ Violation may cause the product installation precision unable to meet the catalog specification.

Do not apply inappropriate force and strike to the product to prevent damage and loss of precision and warranty.

→ Violation may cause product damage or precision unable to meet catalog specification.

Environment Precautions

Installation Precautions

Please do not turn off travel stroke limitation sensor during use to deactivate the sensor. When turning the knob in the back of motor, please do not overuse the travel stroke.

→ Violation may result in personal injury or product damage.

During installation of peripheral mechanism on product upper board/ lower board, please keep the stage in horizontal position with fixation. (Make sure the platform installation flatness is within 0.01mm and the stage installation inclination angle is below 1° to prevent poor precision due to stage deformation.)

→ Violation may result in personal injury or product damage.

Do not remove any parts of the precision motorized stage arbitrarily to prevent loss of precision and warranty. If service is needed, please contact salesperson.

→ Violation may cause product damage or precision unable to meet catalog specification.

If screw hole does not fit or additional screw hole is needed, please contact salesperson; do not handle it by yourself to prevent loss of precision and warranty.

→ Violation may cause product damage or precision unable to meet catalog specification.

Accessories and parts of the product are not water-proof or dust-proof; please do not use the product directly in oil misty, dusty or humid environment.

→ Violation may cause product damage or precision unable to meet catalog specification.

Installation Precaution

Installation procedures:

1. Make sure that installation surface does not have any flash, dust or dent.
2. Please put the product on the installation surface.
3. Please adjust according to installation hole position (aiming screw hole).
4. It is suggested to use the screws in compliance with standard specifications.
5. Use torque wrench to tighten screw.

Precautions for product use environment:

<table>
<thead>
<tr>
<th>Environmental Condition</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shipping temperature</td>
<td>-10°C ~ 70°C</td>
</tr>
<tr>
<td>Shipping humidity</td>
<td>below 90%RH (non-condensing)</td>
</tr>
<tr>
<td>Installation temperature</td>
<td>0°C ~ 40°C</td>
</tr>
<tr>
<td>Installation humidity</td>
<td>below 20% ~ 80%RH (non-condensing)</td>
</tr>
<tr>
<td>Environment gas</td>
<td>indoor (not contain corrosive gas, flammable gas, oil mist and dust)</td>
</tr>
</tbody>
</table>