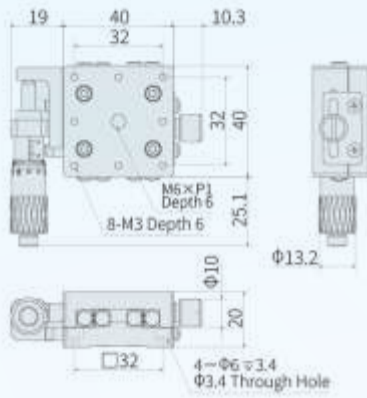


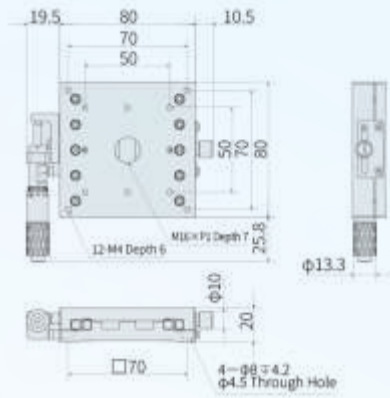
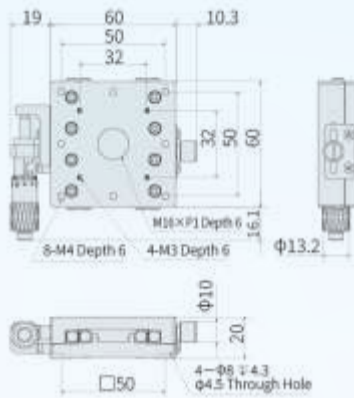
# X-Axis Manual Stages, Cross Roller Guide

## Dimensional Drawing of Manual X-Axis Stages

### DE-XPG40



### DE-XPG60



\*A40, A60, A80 are available sizes of the screw hole on sliding table

Specification Table of Manual X-Axis Stages

| Part Number of Manual X-Axis Stages |     | Manual X-Axis Stages | Movement | Load Capacity (N) |          | Straightness            | Minimum Reading   | Weight |
|-------------------------------------|-----|----------------------|----------|-------------------|----------|-------------------------|-------------------|--------|
| Type of Manual X-Axis Stages        | No. | (mm)                 | (mm)     | Horizontal        | Vertical | ( $\mu\text{m}$ )       | ( $\mu\text{m}$ ) | (kg)   |
| DE-XPG                              | 40  | 40×40                | ±6.5     | 19.6              | 9.8      | Within 10 $\mu\text{m}$ | 10                | 0.14   |
|                                     | 60  | 60×60                |          | 49                | 19.6     |                         |                   | 0.25   |
|                                     | 80  | 80×80                | ±12.5    | 98                | 49       |                         |                   | 0.5    |

## Alteration of Manual X-Axis Stages

| Alterations of Manual X-Axis Stages | Changing the position of the micrometer knob |                                   |                                |   |                                 |
|-------------------------------------|--|-----------------------------------|--------------------------------|---|---------------------------------|
| Manual X-Axis Stages Spec.          | Manual X-Axis Stages Center<br>              | Center Left and Right Reverse<br> | Center Up and Down Reverse<br> | Center Left and Right/Up and Down Reverse<br> | Side Left and Right Reverse<br> |
| Code Manual X-Axis Stages           | A  | AR                                | AZ                             | AZR   | CR                              |

| Alterations of Manual X-Axis Stages | Changing the position of the micrometer knob |  |                   |                       |                             |
|-------------------------------------|--|--|-------------------|-----------------------|-----------------------------|
| Manual X-Axis Stages Spec.          | Side Up and Down Reverse<br>                 | Left and Right/Up and Down Reverse<br> | Disc Clamping<br> | Opposite Clamping<br> | Without Micrometer Knob<br> |
| Manual X-Axis Stages Code           | CZ   | CZR                                    | H                 | P                     | MN                          |

### Caution of Manual X-Axis Stages

- Stage usage environment of X-Axis Stages  
Usage environment of X-Axis Stages: 10~50°C, 20~70%RH (non-condensing)  
Recommended usage environment of X-Axis Stages: 22±5°C, 20~70%RH (non-condensing)
- Guide mechanism  
Since a cross roller guide is used as the guide mechanism, inject lubricant in a timely manner according to the usage conditions to prevent the life of the cross roller guide from being reduced and deteriorated due to lubricant reduction.
- Clamping mechanism
  - The clamping mechanism of the slide table is fixed by the frictional force generated by the fastening screw, so if the external force exceeds the frictional force of the clamping mechanism, the slide table will move. The user must take appropriate measures during use to prevent the table surface from moving.
  - Holding force refers to the value of the force that prevents the slide table from moving in the clamped state. The maximum holding force varies depending on the tightening torque, so ensure sufficient safety factors when designing.
- A slide table with a micrometer knob mounted on the transport mechanism is generally called a standard type if it has a shape like the figure below. You can freely select by combining the installation space, installation posture, and operation method. However, there are some models of X-Axis Stages where the installation position of the micrometer knob cannot be changed due to the product structure.
- There may be cases where the upper and lower tables are deformed due to differences in the flatness of the installation surface. Deformation of the table surface causes backlash, loosening due to failure to obtain the specified preload, and poor sliding due to excessive preload. Therefore, it is recommended to maintain the flatness of the installation surface at approximately 5 microns.

