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www.gmtlinear.com
<table>
<thead>
<tr>
<th>Slide way</th>
<th>Structure</th>
<th>Characteristic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crossed roller</td>
<td><img src="crossed-roller.png" alt="Image" /></td>
<td>◆ Composed of moving rails with 2 V-groove surfaces harden finish, ground precisely, and roller bearings which are connective and take turns moving in 90 degrees to meet requirement of high parallelism and high flatness. In structure, V-groove and crossed roller acquire movement in high accuracy and capacity by linear transmission to act a high precision movement and load capacity performance.</td>
</tr>
<tr>
<td>Linear ball</td>
<td><img src="linear-ball.png" alt="Image" /></td>
<td>◆ Slide way and body is in one unit, and Gothic arc-groove ground precisely to meet requirement of high parallelism and high flatness. Gothic arc-groove formed by dual arc-grooves individually on upper and lower rails of body. Ball moving in single groove is structured by 2 points - contact, and total 4 contact points in dual arc-groove to form strong rail construction. In case of rails of SUS-STAGE is to set ball assembly in arc-groove to save traditional adjustment and revision time. In addition, without adjustment screw would save accuracy problem and maintenance time caused by loosen screw, and cheaper as well.</td>
</tr>
<tr>
<td>Dovetail type</td>
<td><img src="dovetail-type.png" alt="Image" /></td>
<td>◆ Dovetail plane-pinion and rack (Main material: Brass or aluminum alloy) GMT supply proper models suitable for equipped to various modules such as small, rough-vibrate, large size for installation. Driven-adjustment mode is rack and pinion. Apply to higher working frequency, requirement of faster movement and larger stroke. ◆ Screw-driven plane (main material: brass) Prepared by easy-carry standard and slide type fit for inner set mode. Driven adjustment mode is screw shaft mode. Apply to lower frequency, fine tuning environment.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Application</th>
<th>Moving accuracy</th>
<th>Load capacity</th>
<th>Rigidity</th>
</tr>
</thead>
<tbody>
<tr>
<td>This applied to precise movement device in high accuracy and high capacity, optical instruments in precise gauging and fine tuning, various machine tools, gauging instruments, precise positioning and quantitative movement... etc.</td>
<td>◆</td>
<td>◆</td>
<td>◆</td>
</tr>
<tr>
<td>This applied to precise positioning device in high accuracy and mid-capacity, product and design integrated system, optical experiment precise transportation, and fine tuning mechanism application.</td>
<td>◆</td>
<td>◆</td>
<td>◆</td>
</tr>
<tr>
<td>This applied to optical instruments and equipments, sampler, detecting device, semi-conductor manufacturing equipment, test machine, microscope, transit machine, machining center, medical instrument, printer and others.</td>
<td>◆</td>
<td>◆</td>
<td>◆</td>
</tr>
</tbody>
</table>
**Straightness** *(refer to JIS B 6191-1993)*
In linear motion units, geometric straight line decides positions in order from datum point to same direction, differences between length variation in those positions and datum is as measured value. To connect datum and final testing point, the max. difference of geometric line is called "Straightness".

**XY Vertical value** *(refer to JIS B 7440-1987)*
Vertical value between 2 axes also for one line of geometric line in transmission datum and one in its corresponding right angle. In the other direction (Opposite), to take slanting proportion in linear transmission, reference point of X-axis stage, and geometric line of final tested position as datum axes. X-axis stage as for datum axis, maximum of parallel errors from its vertical geometric line in opposition to datum position of Y-axis stage to final tested position is called XY vertical value.

**Yawing and pitching** *(refer to JIS B 6191-1993)*
Linear motion parts would occur slanting in transmitting, and slanting proportion would cause deflection in linear transmission. Position is decided by same direction from datum point in order, and maximum angular gap measured from horizontal direction of each position corresponding to the datum is called yawing (deviation).
Same situation to have the maximum angular gap from vertical direction of each position corresponding to the datum called pitching.

**Concentricity** *(refer to JIS B 6191-1993,B 6194-1997)*
Difference of datum circle and geometric circle. All points in line in same plane of 2 concentric circles, radius difference of 2 concentric circles is in case of smallest radial interval difference. Opposite to geometric circle, measured difference is called concentricity. Fix rotating stage on the plate, and put micrometer around stage. Have it to rotate one circle (360°) to proceed measuring. Concentricity is half of top value shown in micrometer.

**Parallelism** *(refer to JIS B 6191-1993)*
Parallelism of plane, and slanting proportion between parallel interval to mechanism parts, and degrees between center place of manual stage movement and base plate is called parallelism. Parallelism measurement is to fix micrometer on the plate, and operate manual stage with clamping device to measure the maximum of 4 corner errors.

**Plane travel amplitude** *(refer to JIS B 6191-1993)*
Rotate as center of single axis, in the period of plane turning, max. slanting value of deviation of vertical plane to datum axis back to stage vertically is called plane travel amplitude. Take micrometer fixed on the plate to contact upper edge of rotating stage (rotating one circle 360°), and proceed measuring. Top value shown in micrometer is called Plane-pulsating.
Single axis

- Move upper plate back and forth, and secure the screw on the base plate and work piece with tight confirmation.

Dual-axes

- Screw security same as single axis.

Goniometer stage

- Rotate knob clockwise to move plat to the other side. (Please operate before loosing safety knob), to adjust locked screw into half-secured status.
- Next on, pleas rotate knob anticlockwise to move plat to the other side, and secure the screw on base plate and work piece with tight confirmation.

Other stages

- Move upper plate by rotating, and take the screw through it.
- Proceed taking screws through base plate in order and finding matched holes at same time.
- Lock the stage on the work piece with tight confirmation.

- Considering easy installation fit for other device, threaded hole pattern is made to meet requirement of securing from upper or lower direction, and this provides more options for installation.
 Axes definition
About definition of moving axis and rotating axis, GMT defines as chart below.
X axis, Y axis are in parallel direction; Z axis in vertical direction;
Rotating around X, Y, Z axes are called α axis, β axis, θ axis individually.

 Temperatue of environment
Please operate stages in regular range of temperature as listed.
Please contact GMT if products in larger range required.

<table>
<thead>
<tr>
<th>Stages classification</th>
<th>Working temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stainless steel stage</td>
<td>-20°C ~ 120°C</td>
</tr>
<tr>
<td>Stainless steel slide</td>
<td>-20°C ~ 70°C</td>
</tr>
<tr>
<td>Others</td>
<td></td>
</tr>
</tbody>
</table>

 Volume-loaded limit recommendation

 Basic declaration
Diagrams of representative explanation in catalogs are sampled in GMT products series.
Products compared to diagrammatic examples in same series may have some difference
in shape due to different mechanism design and spec, but basic operation remark are
all the same.

 Notice
Please read notices as follows before operation, this would have GMT series performed
as best motion accuracy and usage life.

 Operation principles
1. GMT product series are all composed of parts in high accuracy, please avoid
environment of extreme high temperature, extreme low temperature, huge temperature
variation, exposed to sun light, high humidity, high dust, high vibration, high shock and
easy-dewed... etc.

2. To maintain motion accuracy and usage life of products in all series, please check
allowable capacity of the product before operation. Don’t overload out of rated capacity.

3. Besides allowable capacity limit, please avoid taking gravity of loaded object over the
edge of the stage.

4. All kinds of rolling mechanisms set in the product need proper clean and lubricated
maintenance in the period of operating, depending on situations of operation,
and use appropriate lubricant.

5. All kinds of rolling mechanisms set in the product are adjusted and leveled by engineers
before shipment, please don’t try any adjustment if not trained or authorized.

6. Please use right lock unit, tools and wrench torque while processing products in
positioning security and connecting security.

7. For accessories of GMT product series or related information, GMT sales could offer
best consultation.

8. Special purpose application or other spec, GMT also provide custom-made service.
## Specification options

<table>
<thead>
<tr>
<th>Transmission</th>
<th>Axis</th>
<th>Nominal dimension</th>
<th>Material</th>
<th>Feed position</th>
<th>Slide way</th>
<th>Feeding specification</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4. Crossed roller bearing</td>
<td>8. Feed screw type</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>C: Center</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>CR</td>
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</tr>
<tr>
<td></td>
<td>R: Right hand</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CZ</td>
<td>C: Center</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Z: Multiple combination</td>
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<tr>
<td>CRZ</td>
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</tr>
<tr>
<td></td>
<td>R: Right hand</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Z: Multiple combination</td>
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</tr>
<tr>
<td>L: Left side</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R: Right side</td>
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<td></td>
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### Specification

<table>
<thead>
<tr>
<th>Model no.</th>
<th>Table size</th>
<th>Axis</th>
<th>Feed position</th>
<th>Travel stroke</th>
<th>Micrometer minimum reading</th>
<th>Movement accuracy straightness</th>
<th>Load capacity (kgf)</th>
<th>Weight (kg)</th>
<th>Material</th>
<th>Surface finish</th>
</tr>
</thead>
<tbody>
<tr>
<td>MX40-AC</td>
<td>40°40</td>
<td>X axis</td>
<td>Center</td>
<td>±6.5</td>
<td>10 µm</td>
<td>5 µm</td>
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<td>0.14</td>
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<td>Side</td>
<td></td>
<td></td>
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<th>Movement accuracy straightness</th>
<th>Load capacity (kg)</th>
<th>Weight (kg)</th>
<th>Material</th>
<th>Surface finish</th>
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<tbody>
<tr>
<td>MX60-AC</td>
<td>60*60</td>
<td>X</td>
<td>Center</td>
<td>16.5</td>
<td>10 μm</td>
<td>5 μm</td>
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<td>Center</td>
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<th>Travel stroke</th>
<th>Micrometer minimum reading</th>
<th>Movement accuracy straightness</th>
<th>Load capacity (kg)</th>
<th>Weight (kg)</th>
<th>Material</th>
<th>Surface finish</th>
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<td>Center</td>
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<td>5 μm</td>
<td>10</td>
<td>0.5</td>
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<tr>
<td>MX80-AS</td>
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<td>X axis</td>
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<td>±12.5</td>
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<td>5 μm</td>
<td>10</td>
<td>0.5</td>
<td>Aluminum alloy</td>
<td>Black anodized</td>
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<td>Center</td>
<td>Center</td>
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<td>5 μm</td>
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<td>5 μm</td>
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<td>Axis</td>
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<td>Travel stroke</td>
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<td>Movement accuracy straightness</td>
<td>Load capacity (kgf)</td>
<td>Weight (kg)</td>
<td>Material</td>
<td>Surface finish</td>
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<td>5 µm</td>
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<td>Side</td>
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<td>10 µm</td>
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<td>Center</td>
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<td>5 µm</td>
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<td>1.4</td>
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<td>Black anodized</td>
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<td>XY axes</td>
<td>Side</td>
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<td>10 µm</td>
<td>5 µm</td>
<td>14.3</td>
<td>1.4</td>
<td>Aluminum alloy</td>
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</tr>
</tbody>
</table>
## Specification

<table>
<thead>
<tr>
<th>Model no.</th>
<th>Table size</th>
<th>Axis</th>
<th>Feed position</th>
<th>Travel stroke</th>
<th>Micrometer minimum reading</th>
<th>Movement accuracy straightness</th>
<th>Load capacity (kgf)</th>
<th>Weight (kg)</th>
<th>Material</th>
<th>Surface finish</th>
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<td>Center</td>
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<td>18.4</td>
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### Specification

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<th>Movement accuracy</th>
<th>Load capacity (kgf)</th>
<th>Weight (kg)</th>
<th>Material</th>
<th>Surface finish</th>
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<tbody>
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<td>5 μm</td>
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<td>0.2</td>
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<td>Aluminum alloy</td>
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</table>

*Connecting board spec please refer to P64/ P65*
### Specification

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<th>Model no.</th>
<th>Table size</th>
<th>Axis</th>
<th>Feed position</th>
<th>Travel stroke</th>
<th>Micrometer minimum reading</th>
<th>Movement accuracy straightness</th>
<th>Load capacity (kg)</th>
<th>Weight (kg)</th>
<th>Material</th>
<th>Surface finish</th>
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</thead>
<tbody>
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<td>5 μm</td>
<td>10</td>
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<td>9.0540C</td>
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<tr>
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<td>XY axes</td>
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<td>0.46</td>
<td>0.46</td>
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<tr>
<td>MY40-SS</td>
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<td>XY axes</td>
<td>Side</td>
<td>9.7</td>
<td>0.46</td>
<td>0.46</td>
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</table>

*Transmission rails are linear ball slide ways.*
### Specification

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<th>Model no.</th>
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<th>Weight (kg)</th>
<th>Material</th>
<th>Surface finish</th>
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<tbody>
<tr>
<td>MX60-SC</td>
<td>60*60</td>
<td>X axis</td>
<td>Center</td>
<td>± 6.5</td>
<td>10 μm</td>
<td>5 μm</td>
<td>20</td>
<td>0.4</td>
<td>Steel</td>
<td>Electroless Nickel plating</td>
</tr>
<tr>
<td>MX60-SS</td>
<td>60*60</td>
<td>X axis</td>
<td>Side</td>
<td>± 6.5</td>
<td>10 μm</td>
<td>5 μm</td>
<td>20</td>
<td>0.4</td>
<td>Steel</td>
<td>Electroless Nickel plating</td>
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<tr>
<td>MY60-SC</td>
<td>60*60</td>
<td>XY axes</td>
<td>Center</td>
<td>± 6.5</td>
<td>10 μm</td>
<td>5 μm</td>
<td>19.6</td>
<td>0.8</td>
<td>Steel</td>
<td>Electroless Nickel plating</td>
</tr>
<tr>
<td>MY60-SS</td>
<td>60*60</td>
<td>XY axes</td>
<td>Side</td>
<td>± 6.5</td>
<td>10 μm</td>
<td>5 μm</td>
<td>19.6</td>
<td>0.8</td>
<td>Steel</td>
<td>Electroless Nickel plating</td>
</tr>
</tbody>
</table>

*Transmission rails are linear ball slide ways.*
◆ Specification

<table>
<thead>
<tr>
<th>Model no.</th>
<th>Table size</th>
<th>Axis</th>
<th>Feed position</th>
<th>Travel stroke</th>
<th>Micrometer minimum reading</th>
<th>Movement accuracy straightness</th>
<th>Load capacity (kgf)</th>
<th>Weight (kg)</th>
<th>Material</th>
<th>Surface finish</th>
</tr>
</thead>
<tbody>
<tr>
<td>MX80-SC</td>
<td>80x80</td>
<td>X axis</td>
<td>Center</td>
<td>12.5</td>
<td>10 μm</td>
<td>5 μm</td>
<td>27</td>
<td>0.9</td>
<td>SUS316L</td>
<td>Electroless Nickel plating</td>
</tr>
<tr>
<td>MX80-SS</td>
<td>80x80</td>
<td>X axis</td>
<td>Side</td>
<td>12.5</td>
<td>10 μm</td>
<td>5 μm</td>
<td>27</td>
<td>0.9</td>
<td>SUS316L</td>
<td>Electroless Nickel plating</td>
</tr>
<tr>
<td>MY80-SC</td>
<td>80x80</td>
<td>XY axes</td>
<td>Center</td>
<td>12.5</td>
<td>10 μm</td>
<td>5 μm</td>
<td>26.1</td>
<td>1.8</td>
<td>SUS316L</td>
<td>Electroless Nickel plating</td>
</tr>
<tr>
<td>MY80-SS</td>
<td>80x80</td>
<td>XY axes</td>
<td>Side</td>
<td>12.5</td>
<td>10 μm</td>
<td>5 μm</td>
<td>26.1</td>
<td>1.8</td>
<td>SUS316L</td>
<td>Electroless Nickel plating</td>
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</tbody>
</table>

Unit: mm

★ Transmission rails are linear ball slide ways.
# Specification

<table>
<thead>
<tr>
<th>Model no.</th>
<th>Table size</th>
<th>Axis</th>
<th>Feed position</th>
<th>Travel stroke</th>
<th>Micrometer minimum reading</th>
<th>Movement accuracy straightness</th>
<th>Load capacity (kgf)</th>
<th>Weight (kg)</th>
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<th>Surface finish</th>
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</thead>
<tbody>
<tr>
<td>MX100-SC</td>
<td>100*100</td>
<td>X axis</td>
<td>Center</td>
<td>±12.5</td>
<td>10 μm</td>
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<td>35</td>
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<td>99.6540C</td>
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<td>Side</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>MY100-SC</td>
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<td>Center</td>
<td></td>
<td>33.6</td>
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<td>2.66</td>
<td>Ni-Clad</td>
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<tr>
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<td>Side</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td>Ni-Clad</td>
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</tr>
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* Transmission rails are linear ball slide ways.
### Specification

<table>
<thead>
<tr>
<th>Model no.</th>
<th>Table size</th>
<th>Travel stroke</th>
<th>Micrometer minimum reading</th>
<th>Movement accuracy</th>
<th>Load capacity (kg)</th>
<th>Weight (kg)</th>
<th>Material</th>
<th>Surface finish</th>
</tr>
</thead>
<tbody>
<tr>
<td>MZL40-SCR</td>
<td>40*40</td>
<td>±6.5</td>
<td>10 μm</td>
<td>5 μm</td>
<td>25°</td>
<td>5.0</td>
<td>0.32</td>
<td>Electroless Nickel plating</td>
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<tr>
<td>MZL60-SCR</td>
<td>60*60</td>
<td>±12.5</td>
<td>10 μm</td>
<td>5 μm</td>
<td>25°</td>
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<td>0.58</td>
<td>SUS430C</td>
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<tr>
<td>MZL80-SCR</td>
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<td>10 μm</td>
<td>5 μm</td>
<td>25°</td>
<td>5.0</td>
<td>1.2</td>
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**Unit**: mm
### Model MC2A-60

<table>
<thead>
<tr>
<th>M</th>
<th>C</th>
<th>2</th>
<th>A</th>
<th>Stage dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td>M : Manual</td>
<td>C : Dovetail</td>
<td>1 : X axis</td>
<td>A : Feed screw type</td>
<td>As option in catalog</td>
</tr>
<tr>
<td>A : Automatic</td>
<td>T : Tilt stage</td>
<td>2 : XY axes</td>
<td>B : Rack and pinion type</td>
<td></td>
</tr>
<tr>
<td>M : Magnetic</td>
<td></td>
<td>3 : Z axis</td>
<td>C : Rack and pinion type / Long stroke</td>
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</tr>
<tr>
<td>Z : Horizontal</td>
<td>Z axis</td>
<td>4 : X axis +L plate</td>
<td>D : Rack and pinion type / Simple type</td>
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<td></td>
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<td>5 : XZ axes</td>
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### Specification

<table>
<thead>
<tr>
<th>Model no.</th>
<th>Stage size</th>
<th>Travel stroke</th>
<th>Minimum reading (Vernier)</th>
<th>Movement accuracy (pm)</th>
<th>Load capacity (kgf)</th>
<th>Weight (kg)</th>
<th>Material</th>
<th>Surface finish</th>
</tr>
</thead>
<tbody>
<tr>
<td>MC1A-25</td>
<td>25*25</td>
<td>±3</td>
<td>0.1mm/Vernier</td>
<td>30 pm</td>
<td>3.0</td>
<td>0.07</td>
<td>Steel</td>
<td>Black phosphated</td>
</tr>
<tr>
<td>MC1A-40</td>
<td>40*40</td>
<td>±7</td>
<td></td>
<td></td>
<td>3.0</td>
<td>0.19</td>
<td>Brass</td>
<td></td>
</tr>
<tr>
<td>MC1A-60</td>
<td>60*60</td>
<td>±9</td>
<td></td>
<td></td>
<td>4.0</td>
<td>0.6</td>
<td>Aluminum</td>
<td></td>
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</table>

* Distance of one revolution is 0.5 mm
### Specification

**Unit:** mm

<table>
<thead>
<tr>
<th>Model no.</th>
<th>Stage size</th>
<th>Travel stroke</th>
<th>Minimum reading (Vernier)</th>
<th>Movement accuracy (μm)</th>
<th>Load capacity (kgf)</th>
<th>Weight (kg)</th>
<th>Material</th>
<th>Surface finish</th>
</tr>
</thead>
<tbody>
<tr>
<td>MC2A-25</td>
<td>25×25</td>
<td>±3</td>
<td>0.1mm/Vernier</td>
<td>30 μm</td>
<td>2.9</td>
<td>0.15</td>
<td>Glass, Brass</td>
<td>Black phosphor coated</td>
</tr>
<tr>
<td>MC2A-40</td>
<td>40×40</td>
<td>±3</td>
<td>0.1mm/Vernier</td>
<td>30 μm</td>
<td>2.8</td>
<td>0.38</td>
<td>Glass, Brass</td>
<td>Black phosphor coated</td>
</tr>
<tr>
<td>MC2A-60</td>
<td>60×60</td>
<td>±3</td>
<td>0.1mm/Vernier</td>
<td>30 μm</td>
<td>3.4</td>
<td>1.2</td>
<td>Glass, Brass</td>
<td>Black phosphor coated</td>
</tr>
</tbody>
</table>

※ Distance of one revolution is 0.5 mm

<table>
<thead>
<tr>
<th>Model no.</th>
<th>Stage size</th>
<th>Travel stroke</th>
<th>Minimum reading (Vernier)</th>
<th>Movement accuracy (μm)</th>
<th>Load capacity (kgf)</th>
<th>Weight (kg)</th>
<th>Material</th>
<th>Surface finish</th>
</tr>
</thead>
<tbody>
<tr>
<td>MC4A-25</td>
<td>25×25</td>
<td>±3</td>
<td>0.1mm/Vernier</td>
<td>30 μm</td>
<td>1.0</td>
<td>0.09</td>
<td>Glass, Stainless steel</td>
<td>Black phosphor coated</td>
</tr>
<tr>
<td>MC4A-40</td>
<td>40×40</td>
<td>±3</td>
<td>0.1mm/Vernier</td>
<td>30 μm</td>
<td>1.0</td>
<td>0.26</td>
<td>Glass, Stainless steel</td>
<td>Black phosphor coated</td>
</tr>
<tr>
<td>MC4A-60</td>
<td>60×60</td>
<td>±3</td>
<td>0.1mm/Vernier</td>
<td>30 μm</td>
<td>2.0</td>
<td>0.75</td>
<td>Glass, Stainless steel</td>
<td>Black phosphor coated</td>
</tr>
</tbody>
</table>

※ Distance of one revolution is 0.5 mm
Use slotted-driver to lock clockwise to moderate sliding, rotating anticlockwise to accurate sliding smoothly.

**Specification**

<table>
<thead>
<tr>
<th>Model no.</th>
<th>Stage size</th>
<th>Travel stroke</th>
<th>Minimum reading (Vernier)</th>
<th>Movement accuracy straightness</th>
<th>Load capacity (kgf)</th>
<th>Weight (kg)</th>
<th>Material</th>
<th>Surface finish</th>
</tr>
</thead>
<tbody>
<tr>
<td>MC1B-40</td>
<td>24.8^42</td>
<td>±12</td>
<td>0.1mm/Vernier</td>
<td>30 μm</td>
<td>3.0</td>
<td>0.17</td>
<td>Aluminum alloy</td>
<td>Black anodized</td>
</tr>
<tr>
<td>MC1B-60</td>
<td>40^60</td>
<td>0.21</td>
<td></td>
<td>0.29</td>
<td>0.40</td>
<td>0.56</td>
<td>Black anodized</td>
<td></td>
</tr>
<tr>
<td>MC1B-90</td>
<td>40^90</td>
<td>0.35</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>MC1B-140</td>
<td>40^140</td>
<td>0.60</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Distance of one revolution is 18 mm
Use slotted-driver to lock clockwise to moderate sliding, rotating anticlockwise to accurate sliding smoothly.

### Specification

<table>
<thead>
<tr>
<th>Model no.</th>
<th>Stage size</th>
<th>Travel stroke</th>
<th>Minimum reading (Verrier)</th>
<th>Movement accuracy straightness</th>
<th>Load capacity (kgf)</th>
<th>Weight (kg)</th>
<th>Material</th>
<th>Surface finish</th>
</tr>
</thead>
<tbody>
<tr>
<td>MC4B-40</td>
<td>24.8*42</td>
<td>±12</td>
<td>0.1mm/Verrier</td>
<td>30 μm</td>
<td>1.5</td>
<td>0.17</td>
<td>Aluminum alloy</td>
<td>Black anodized</td>
</tr>
<tr>
<td>MC4B-60</td>
<td>40*60</td>
<td>±21</td>
<td></td>
<td>39 μm</td>
<td>2.0</td>
<td>0.33</td>
<td>Aluminum alloy</td>
<td>Black anodized</td>
</tr>
<tr>
<td>MC4B-90</td>
<td>40*90</td>
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<td></td>
<td></td>
<td></td>
<td>0.45</td>
<td>Aluminum alloy</td>
<td>Black anodized</td>
</tr>
</tbody>
</table>

※ Distance of one revolution is 18 mm

■ Outer assembly used by M2 screw, inner assembly used by M3 screw.

■ If chart scale is L100, different from L150, L200.

■ Use slotted-driver to lock clockwise to moderate sliding, rotating anticlockwise to accurate sliding smoothly.

### Specification

<table>
<thead>
<tr>
<th>Model no.</th>
<th>Stage size</th>
<th>Travel stroke</th>
<th>Minimum reading (Verrier)</th>
<th>Movement accuracy straightness</th>
<th>Load capacity (kgf)</th>
<th>Weight (kg)</th>
<th>Material</th>
<th>Surface finish</th>
</tr>
</thead>
<tbody>
<tr>
<td>MC1C-100</td>
<td>100</td>
<td>±40</td>
<td></td>
<td>30 μm</td>
<td>3.0</td>
<td>0.14</td>
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<tr>
<td>MC1C-150</td>
<td>150</td>
<td>±65</td>
<td></td>
<td>40 μm</td>
<td>3.0</td>
<td>0.17</td>
<td>Aluminum alloy</td>
<td>Black anodized</td>
</tr>
<tr>
<td>MC1C-200</td>
<td>200</td>
<td>±90</td>
<td></td>
<td>50 μm</td>
<td>3.0</td>
<td>0.21</td>
<td>Aluminum alloy</td>
<td>Black anodized</td>
</tr>
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※ Distance of one revolution is 18 mm
### Specification

<table>
<thead>
<tr>
<th>Model no.</th>
<th>Stage size</th>
<th>Travel stroke</th>
<th>Minimum reading (Vernier)</th>
<th>Movement accuracy straightness</th>
<th>Load capacity (kgf)</th>
<th>Weight (kg)</th>
<th>Material</th>
<th>Surface finish</th>
</tr>
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<tbody>
<tr>
<td>MC4C-100</td>
<td>100</td>
<td>±40</td>
<td>0.1mm/Vernier</td>
<td>39 μm</td>
<td>1.5</td>
<td>0.16</td>
<td>Aluminum alloy</td>
<td>Black anodized</td>
</tr>
</tbody>
</table>

*Distance of one revolution is 18 mm

- Available combined with MC18(P.000), MC28(P.000), MC1C.
- Use slotted-driver to lock clockwise to moderate sliding, rotating anticlockwise to accurate sliding smoothly.

- Scale of MC1D-25 - MC1D-60 is opposite to fixed mounting plane.

<table>
<thead>
<tr>
<th>Model no.</th>
<th>Stage size</th>
<th>Travel stroke</th>
<th>Distance of one revolution</th>
<th>Minimum reading (Vernier)</th>
<th>Movement accuracy straightness</th>
<th>Load capacity (kgf)</th>
<th>Weight (kg)</th>
<th>Material</th>
<th>Surface finish</th>
</tr>
</thead>
<tbody>
<tr>
<td>MC1D-25</td>
<td>25*25</td>
<td>±5</td>
<td>17</td>
<td>0.1mm/Vernier</td>
<td>20 μm</td>
<td>3.0</td>
<td>0.09</td>
<td>Brass</td>
<td>Black fluororesin</td>
</tr>
<tr>
<td>MC1D-40</td>
<td>40*40</td>
<td>±10</td>
<td>20</td>
<td>0.1mm/Vernier</td>
<td>20 μm</td>
<td>3.0</td>
<td>0.21</td>
<td>Aluminum alloy</td>
<td>Black anodized</td>
</tr>
<tr>
<td>MC1D-60</td>
<td>60*60</td>
<td>±20</td>
<td>18</td>
<td>0.1mm/Vernier</td>
<td>30 μm</td>
<td>4.0</td>
<td>0.64</td>
<td>Aluminum alloy</td>
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### Specification

<table>
<thead>
<tr>
<th>Model no.</th>
<th>Stage size</th>
<th>Travel stroke</th>
<th>Distance of one revolution</th>
<th>Minimum reading (Vernier)</th>
<th>Movement accuracy straightness</th>
<th>Load capacity (kgf)</th>
<th>Weight (kg)</th>
<th>Material</th>
<th>Surface finish</th>
</tr>
</thead>
<tbody>
<tr>
<td>MC2D-25</td>
<td>25×25</td>
<td>±5</td>
<td>17</td>
<td>20 μm</td>
<td>0.18</td>
<td>2.9</td>
<td>0.18</td>
<td>Brass</td>
<td>Black fluorocarbon</td>
</tr>
<tr>
<td>MC2D-40</td>
<td>40×40</td>
<td>±10</td>
<td>20</td>
<td>20 μm</td>
<td>0.37</td>
<td>2.8</td>
<td>0.37</td>
<td>Aluminum alloy</td>
<td>Black anodized</td>
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<tr>
<td>MC2D-60</td>
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<td>18</td>
<td>30 μm</td>
<td>1.19</td>
<td>3.0</td>
<td>1.19</td>
<td>Aluminum alloy</td>
<td>Black anodized</td>
</tr>
</tbody>
</table>

Scale of MC4D-25 is opposite to fixed mounting plane.

### Specification

<table>
<thead>
<tr>
<th>Model no.</th>
<th>Stage size</th>
<th>Travel stroke</th>
<th>Distance of one revolution</th>
<th>Minimum reading (Vernier)</th>
<th>Movement accuracy straightness</th>
<th>Load capacity (kgf)</th>
<th>Weight (kg)</th>
<th>Material</th>
<th>Surface finish</th>
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<tbody>
<tr>
<td>MC4D-25</td>
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<td>20 μm</td>
<td>0.11</td>
<td>0.7</td>
<td>0.11</td>
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<td>Black fluorocarbon</td>
</tr>
<tr>
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<td>20</td>
<td>20 μm</td>
<td>0.23</td>
<td>1.5</td>
<td>0.23</td>
<td>Aluminum alloy</td>
<td>Black anodized</td>
</tr>
<tr>
<td>MC4D-60</td>
<td>60×60</td>
<td>±20</td>
<td>18</td>
<td>30 μm</td>
<td>0.60</td>
<td>2.0</td>
<td>0.60</td>
<td>Aluminum alloy</td>
<td>Black anodized</td>
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**Specification**

<table>
<thead>
<tr>
<th>Model no.</th>
<th>Stage size</th>
<th>Travel stroke</th>
<th>Micrometer</th>
<th>Movement accuracy</th>
<th>Load capacity (kgf)</th>
<th>Weight (kg)</th>
<th>Material</th>
<th>Surface finish</th>
</tr>
</thead>
<tbody>
<tr>
<td>MZA-25</td>
<td>25*25</td>
<td>±2.0</td>
<td>10 μm</td>
<td>3 μm</td>
<td>1.0</td>
<td>0.06</td>
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<td>Black anodized</td>
</tr>
<tr>
<td>MZA-40</td>
<td>40*40</td>
<td>±3.0</td>
<td>10 μm</td>
<td>3 μm</td>
<td>1.0</td>
<td>0.2</td>
<td>Aluminum alloy</td>
<td>Black anodized</td>
</tr>
<tr>
<td>MZA-40H</td>
<td>40*40</td>
<td>±3.0</td>
<td>10 μm</td>
<td>3 μm</td>
<td>2.0</td>
<td>0.2</td>
<td>Aluminum alloy</td>
<td>Black anodized</td>
</tr>
<tr>
<td>MZA-60L</td>
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<td>10 μm</td>
<td>3 μm</td>
<td>2.0</td>
<td>0.3</td>
<td>Aluminum alloy</td>
<td>Black anodized</td>
</tr>
<tr>
<td>MZA-60</td>
<td>60*60</td>
<td>±5.0</td>
<td>10 μm</td>
<td>3 μm</td>
<td>4.0</td>
<td>0.6</td>
<td>Aluminum alloy</td>
<td>Black anodized</td>
</tr>
<tr>
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<td>±5.0</td>
<td>10 μm</td>
<td>3 μm</td>
<td>3.0</td>
<td>1.0</td>
<td>Aluminum alloy</td>
<td>Black anodized</td>
</tr>
</tbody>
</table>
### Specification

<table>
<thead>
<tr>
<th>Model no.</th>
<th>Stage size</th>
<th>Travel stroke (X)</th>
<th>Distance of one revolution (Y)</th>
<th>Minimum reading (Microinches)</th>
<th>Movement accuracy straightness (µm)</th>
<th>Load capacity (kgf)</th>
<th>Weight (kg)</th>
<th>Material</th>
<th>Surface finish</th>
</tr>
</thead>
<tbody>
<tr>
<td>MC3B-25</td>
<td>25*25</td>
<td>±2.5</td>
<td>8</td>
<td>0.1mm/Vernier</td>
<td>30 µm</td>
<td>0.7</td>
<td>0.08</td>
<td>Brass</td>
<td>Black fluororesin</td>
</tr>
<tr>
<td>MC3B-40</td>
<td>40*40</td>
<td>±5</td>
<td>13</td>
<td></td>
<td></td>
<td>1.0</td>
<td>0.12</td>
<td>Aluminum alloy</td>
<td>Black anodized</td>
</tr>
<tr>
<td>MC3B-60</td>
<td>60*60</td>
<td>±10</td>
<td>18</td>
<td></td>
<td></td>
<td>1.5</td>
<td>0.47</td>
<td>Black anodized</td>
<td></td>
</tr>
</tbody>
</table>

* Scale is opposite to fixed mounting plane.

### Specification

<table>
<thead>
<tr>
<th>Model no.</th>
<th>Stage size</th>
<th>Travel stroke (X)</th>
<th>Distance of one revolution (Y)</th>
<th>Movement accuracy straightness (µm)</th>
<th>Load capacity (kgf)</th>
<th>Weight (kg)</th>
<th>Material</th>
<th>Surface finish</th>
</tr>
</thead>
<tbody>
<tr>
<td>MC5B-25</td>
<td>25*25</td>
<td>X ±5</td>
<td>Z ±10</td>
<td>X ±0.5 Z ±14</td>
<td>30 µm</td>
<td>0.17</td>
<td>Brass</td>
<td>Black fluororesin</td>
</tr>
<tr>
<td>MC5B-40</td>
<td>40*40</td>
<td>X ±7</td>
<td>Z ±10</td>
<td>X ±0.5 Z ±14</td>
<td>30 µm</td>
<td>0.51</td>
<td>Aluminum alloy</td>
<td>Black anodized</td>
</tr>
<tr>
<td>MC5B-60</td>
<td>60*60</td>
<td>X ±10</td>
<td>Z ±25</td>
<td>X ±0.5 Z ±20</td>
<td>30 µm</td>
<td>0.62</td>
<td>Black anodized</td>
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## Specification

<table>
<thead>
<tr>
<th>Model no.</th>
<th>Stage size</th>
<th>Travel stroke</th>
<th>Distance of one revolution</th>
<th>Parallelism</th>
<th>Load capacity (kg)</th>
<th>Weight (kg)</th>
<th>Material</th>
<th>Surface finish</th>
</tr>
</thead>
<tbody>
<tr>
<td>MZF-80</td>
<td>80*120</td>
<td>40</td>
<td>2</td>
<td>200 μm</td>
<td>7.0</td>
<td>1.25</td>
<td>Aluminum alloy</td>
<td>Black anodized</td>
</tr>
<tr>
<td>MZF-120</td>
<td>120*180</td>
<td>70</td>
<td>3</td>
<td></td>
<td>10.0</td>
<td>3.5</td>
<td>Aluminum alloy</td>
<td>Black anodized</td>
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</table>

**Unit:** mm
### Specification

<table>
<thead>
<tr>
<th>Model no.</th>
<th>Stage size</th>
<th>Distance</th>
<th>Rotating movement accuracy</th>
<th>Micrometer Minimum reading</th>
<th>Offset (Eccentric)</th>
<th>Load capacity (kgf)</th>
<th>Weight (kg)</th>
<th>Material</th>
<th>Surface finish</th>
</tr>
</thead>
<tbody>
<tr>
<td>MR38-AL</td>
<td>Ø38</td>
<td>Coarse 360°</td>
<td>0.02</td>
<td>0.05</td>
<td>1.0</td>
<td>0.09</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MR60-AL</td>
<td>Ø60</td>
<td>Fine 1®</td>
<td>0.05</td>
<td>0.05</td>
<td>3.0</td>
<td>0.28</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MR85-AL</td>
<td>Ø85</td>
<td></td>
<td></td>
<td></td>
<td>4.0</td>
<td>0.48</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MR110-AL</td>
<td>Ø110</td>
<td></td>
<td></td>
<td></td>
<td>5.0</td>
<td>0.75</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

*The transmission of MR series is brass bush rotary system.

**Remark:** Optional of right side feed direction available. Ex. MR-□-AR
- Generally connective to MC1B(P.40), MC2B(P.41), MC4B(P.42), MC1C(P.43) each other.
- For MRE-60-AL, ASAP60 is required necessarily.

### Specification

<table>
<thead>
<tr>
<th>Model no.</th>
<th>Stage size</th>
<th>Distance</th>
<th>Verier minimum reading</th>
<th>Offset (Excursion)</th>
<th>Load capacity (kgf)</th>
<th>Weight (kg)</th>
<th>Material</th>
<th>Surface finish</th>
</tr>
</thead>
<tbody>
<tr>
<td>MRE40-AL</td>
<td>Ø40</td>
<td>Coarse 360°</td>
<td>2°</td>
<td>0.05</td>
<td>5.0</td>
<td>0.14</td>
<td>Aluminum alloy</td>
<td>Black anodized</td>
</tr>
<tr>
<td>MRE60-AL</td>
<td>Ø60</td>
<td></td>
<td>1°</td>
<td></td>
<td>7.0</td>
<td>0.2</td>
<td>Aluminum alloy</td>
<td>Black anodized</td>
</tr>
</tbody>
</table>

Unit: mm

- Mounting holes not matched with SPEC, customized size is acceptable additionally.
### Specification

<table>
<thead>
<tr>
<th>Model no.</th>
<th>Table size</th>
<th>Holding force (kgf)</th>
<th>Parallelism</th>
<th>Weight (kg)</th>
<th>Material</th>
<th>Surface finish</th>
</tr>
</thead>
<tbody>
<tr>
<td>MMS-45</td>
<td>20<em>45</em>45</td>
<td>17.0</td>
<td>0.015</td>
<td>0.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MMS-65</td>
<td>20<em>65</em>65</td>
<td>20.0</td>
<td>0.02</td>
<td>0.6</td>
<td>Aluminum alloy</td>
<td>Black anodized</td>
</tr>
<tr>
<td>MMS-90</td>
<td>20<em>90</em>90</td>
<td>25.0</td>
<td>0.02</td>
<td>1.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MMS-125</td>
<td>20<em>125</em>125</td>
<td>100.0</td>
<td>0.02</td>
<td>2.8</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Unit : mm
## Specification

<table>
<thead>
<tr>
<th>Model no.</th>
<th>Stage size</th>
<th>Travel axis</th>
<th>Distance of one revolution</th>
<th>Travel distance</th>
<th>Load capacity (kgf)</th>
<th>Weight (kg)</th>
<th>Material</th>
<th>Surface finish</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTB-40</td>
<td>40*40</td>
<td>α &amp; β</td>
<td>0° 18' 9&quot;</td>
<td>± 2&quot;</td>
<td>2.0</td>
<td>0.03</td>
<td>Aluminum alloy</td>
<td>Black anodized</td>
</tr>
<tr>
<td>MTB-60</td>
<td>60*60</td>
<td></td>
<td>0° 9' 15&quot;</td>
<td></td>
<td>4.0</td>
<td>0.15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MTB-80</td>
<td>80*80</td>
<td></td>
<td>0° 5' 51&quot;</td>
<td></td>
<td>5.0</td>
<td>0.4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*If mounting holes are not matched with SPEC, custom-made size is acceptable additionally.*
Specification

<table>
<thead>
<tr>
<th>Model no.</th>
<th>Stage size</th>
<th>Travel stroke</th>
<th>Distance of one revolution</th>
<th>Travel distance</th>
<th>Load capacity (kgf)</th>
<th>Weight (kg)</th>
<th>Material</th>
<th>Surface finish</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTS-30</td>
<td>30x30</td>
<td></td>
<td>≈ 1°25'</td>
<td></td>
<td>2.0</td>
<td>0.03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MTS-60</td>
<td>60x60</td>
<td></td>
<td>≈ 0°40'</td>
<td>± 2'</td>
<td>4.0</td>
<td>0.15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MTS-90</td>
<td>90x90</td>
<td></td>
<td>≈ 0°24'</td>
<td></td>
<td>5.0</td>
<td>0.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MTS-125</td>
<td>125x125</td>
<td></td>
<td>≈ 0°16'</td>
<td></td>
<td>5.0</td>
<td>1.0</td>
<td>Aluminum alloy</td>
<td>Black anodized</td>
</tr>
</tbody>
</table>
### Specified Model

<table>
<thead>
<tr>
<th>Model no.</th>
<th>Fitted per feed position</th>
<th>Weight (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AZB40-1</td>
<td>AZB40-1-N</td>
<td>0.08</td>
</tr>
<tr>
<td>AZB40-2</td>
<td>AZB40-2-N</td>
<td>0.07</td>
</tr>
<tr>
<td>AZB60-1</td>
<td>AZB60-1-N</td>
<td>0.19</td>
</tr>
<tr>
<td>AZB80-1</td>
<td>AZB80-1-N</td>
<td>0.22</td>
</tr>
<tr>
<td>AZB80-2</td>
<td>AZB80-2-N</td>
<td>0.41</td>
</tr>
<tr>
<td>AZB100-1</td>
<td>AZB100-1-N</td>
<td>1.04</td>
</tr>
<tr>
<td>AZB120-1</td>
<td>AZB120-1-N</td>
<td>1.80</td>
</tr>
</tbody>
</table>
### Specification

Thread hole sizes are for M4, M6. (Pitch = 25mm)

<table>
<thead>
<tr>
<th>Model no.</th>
<th>Dimensions</th>
<th>Material</th>
<th>Surface finish</th>
<th>Fitted model no. of GMT Mini stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASAP-40</td>
<td>40°40</td>
<td></td>
<td></td>
<td>MC1B-40 · MC2B-40 · MC4B-40</td>
</tr>
<tr>
<td>ASAP-60</td>
<td>60°60</td>
<td>Aluminum alloy</td>
<td>Black anodized</td>
<td>MC1B-60 · MC1B-90 · MC1B-140</td>
</tr>
<tr>
<td>ASAP-80</td>
<td>80°80</td>
<td></td>
<td></td>
<td>MC2B-60 · MC2B-90 · MC4B-60 · MC4B-90</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Model no.</th>
<th>A</th>
<th>B</th>
<th>Hole numbers with thread</th>
<th>T</th>
<th>E</th>
<th>F</th>
<th>Material</th>
<th>Surface finish</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIB-4-120-120</td>
<td>120</td>
<td>21</td>
<td></td>
<td>10</td>
<td>10</td>
<td>Aluminum alloy</td>
<td>Black anodized</td>
<td></td>
</tr>
<tr>
<td>AIB-4-120-200</td>
<td>200</td>
<td>31</td>
<td></td>
<td>10</td>
<td>25</td>
<td>Aluminum alloy</td>
<td>Black anodized</td>
<td></td>
</tr>
<tr>
<td>AIB-4-120-300</td>
<td>300</td>
<td>51</td>
<td></td>
<td>10</td>
<td>25</td>
<td>Aluminum alloy</td>
<td>Black anodized</td>
<td></td>
</tr>
<tr>
<td>AIB-4-150-150</td>
<td>150</td>
<td>21</td>
<td></td>
<td>10</td>
<td>25</td>
<td>Aluminum alloy</td>
<td>Black anodized</td>
<td></td>
</tr>
<tr>
<td>AIB-4-150-200</td>
<td>200</td>
<td>31</td>
<td></td>
<td>10</td>
<td>25</td>
<td>Aluminum alloy</td>
<td>Black anodized</td>
<td></td>
</tr>
<tr>
<td>AIB-4-150-300</td>
<td>300</td>
<td>51</td>
<td></td>
<td>10</td>
<td>25</td>
<td>Aluminum alloy</td>
<td>Black anodized</td>
<td></td>
</tr>
<tr>
<td>AIB-4-200-200</td>
<td>200</td>
<td>45</td>
<td></td>
<td>10</td>
<td>25</td>
<td>Aluminum alloy</td>
<td>Black anodized</td>
<td></td>
</tr>
<tr>
<td>AIB-4-200-300</td>
<td>300</td>
<td>73</td>
<td></td>
<td>10</td>
<td>25</td>
<td>Aluminum alloy</td>
<td>Black anodized</td>
<td></td>
</tr>
</tbody>
</table>

* Mounting hole processed additionally with M6 screw hole in distance of 100mm matrix to center of board.
* To assemble mini stage, fixed base, and secured on anti-vibration stage.
**Model Specification**

<table>
<thead>
<tr>
<th>Model no.</th>
<th>Table size (mm)</th>
<th>Height of rotational center</th>
<th>Travel distance (mm)</th>
<th>Vernier minimum reading (mm)</th>
<th>Distance of one revolution (mm)</th>
<th>Load capacity (kg)</th>
<th>Weight (kg)</th>
<th>Material</th>
<th>Surface Finish</th>
</tr>
</thead>
<tbody>
<tr>
<td>MXG40-25CS</td>
<td>25</td>
<td>±20°</td>
<td>0.1° / Vernier</td>
<td></td>
<td>≈2.2°</td>
<td>3.0</td>
<td>0.18</td>
<td>Brass</td>
<td>Black Fluorocarbon</td>
</tr>
<tr>
<td>MXG40-40CS</td>
<td>40°±40</td>
<td>±15°</td>
<td>0.1° / Vernier</td>
<td></td>
<td>≈1.89°</td>
<td>0.24</td>
<td>0.69</td>
<td>Brass</td>
<td>Black Fluorocarbon</td>
</tr>
<tr>
<td>MXG40-60CS</td>
<td>60</td>
<td>±10°</td>
<td>0.1° / Vernier</td>
<td></td>
<td>≈1.33°</td>
<td>0.69</td>
<td>0.55</td>
<td>Brass</td>
<td>Black Fluorocarbon</td>
</tr>
<tr>
<td>MXG60-35CS</td>
<td>35</td>
<td>±25°</td>
<td>0.1° / Vernier</td>
<td></td>
<td>≈2.0°</td>
<td>0.69</td>
<td>0.55</td>
<td>Brass</td>
<td>Black Fluorocarbon</td>
</tr>
<tr>
<td>MXG60-60CS</td>
<td>60°±60</td>
<td>±10°</td>
<td>0.1° / Vernier</td>
<td></td>
<td>≈1.3°</td>
<td>0.69</td>
<td>0.55</td>
<td>Brass</td>
<td>Black Fluorocarbon</td>
</tr>
<tr>
<td>MXG60-80CS</td>
<td>80</td>
<td>±15°</td>
<td>0.1° / Vernier</td>
<td></td>
<td>≈1.0°</td>
<td>0.69</td>
<td>0.55</td>
<td>Brass</td>
<td>Black Fluorocarbon</td>
</tr>
</tbody>
</table>
## Specification

<table>
<thead>
<tr>
<th>Model no.</th>
<th>Table size</th>
<th>Height of rotational center</th>
<th>Travel distance</th>
<th>Vernier minimum reading</th>
<th>Distance of one revolution</th>
<th>Load capacity (kgf)</th>
<th>Weight (kg)</th>
<th>Material</th>
<th>Surface finish</th>
</tr>
</thead>
<tbody>
<tr>
<td>MYG40-25CS</td>
<td>40°40</td>
<td>25</td>
<td>±25°</td>
<td>±1.0°</td>
<td>U: ±1° T: ±1°</td>
<td>27.4</td>
<td>0.48</td>
<td>Brass</td>
<td>Black fluorocarbon</td>
</tr>
<tr>
<td>MYG40-40CS</td>
<td>40</td>
<td>40</td>
<td>±15°</td>
<td>±1.0°</td>
<td>U: ±2° T: ±2°</td>
<td>26.4</td>
<td>0.49</td>
<td>Brass</td>
<td>Black fluorocarbon</td>
</tr>
<tr>
<td>MYG60-35CS</td>
<td>60°60</td>
<td>35</td>
<td>±25°</td>
<td>±1.0°</td>
<td>U: ±1° T: ±1°</td>
<td>51.9</td>
<td>1.24</td>
<td>Brass</td>
<td>Black fluorocarbon</td>
</tr>
<tr>
<td>MYG60-60CS</td>
<td>60</td>
<td>60</td>
<td>±25°</td>
<td>±1.0°</td>
<td>U: ±1° T: ±1°</td>
<td>52.9</td>
<td>1.10</td>
<td>Brass</td>
<td>Black fluorocarbon</td>
</tr>
</tbody>
</table>

Unit: mm
### Micrometer specification

**Indication**

<table>
<thead>
<tr>
<th>Model no.</th>
<th>Front shape</th>
<th>Installation</th>
<th>Travel stroke</th>
</tr>
</thead>
<tbody>
<tr>
<td>MHGS-FN-6.5</td>
<td>F</td>
<td>N</td>
<td>13</td>
</tr>
</tbody>
</table>

**GMT**

<table>
<thead>
<tr>
<th>Measurement range</th>
<th>Main pitch</th>
<th>Minimum resolution</th>
<th>Microtome tolerance</th>
<th>Vernier</th>
<th>Front tip</th>
<th>Installation way</th>
</tr>
</thead>
<tbody>
<tr>
<td>mm</td>
<td>mm</td>
<td>µm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MHGS-FN-6.5</td>
<td>0~6.5</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MHGS-FP-6.5</td>
<td>0</td>
<td>0.005</td>
<td>0.01</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MHGS-SN-6.5</td>
<td>0~13</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MHGS-SP-6.5</td>
<td>0~25</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MHGS-FN-25</td>
<td>0</td>
<td>0.005</td>
<td>0.01</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MHGS-FP-25</td>
<td>0</td>
<td>0.005</td>
<td>0.01</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MHGS-SN-25</td>
<td>0</td>
<td>0.005</td>
<td>0.01</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MHGS-SP-25</td>
<td>0</td>
<td>0.005</td>
<td>0.01</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MHGS-FN-50</td>
<td>0</td>
<td>0.005</td>
<td>0.01</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MHGS-SP-50</td>
<td>0</td>
<td>0.005</td>
<td>0.01</td>
<td>0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- MHGS type (Standard type), is micrometer used widely and frequently
- Gauging plane: SKS3 (Hardness: above HRC60)
- Scale part finish: Hard chrome-plating
- Attached screw type, recommended thickness: 6mm

**Purpose**

Micrometer, applied to moving equipment in high accuracy, optical adjustment instrument, precise fine tuning stages, various machine tools, gauging instruments, tiny transmission of precise positioning, fixed amount movement.

**Installation way**

Head of micrometer, classifield as shape for lock screw and set screw.

<table>
<thead>
<tr>
<th>Fixed form</th>
<th>Lock screw</th>
<th>Set screw</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shaft dia.</td>
<td>Ø 6.0</td>
<td>Ø 9.525</td>
</tr>
<tr>
<td>Mounting hole tolerance</td>
<td>G7 (+0.004~0.016)</td>
<td>G7 (+0.005~0.020)</td>
</tr>
<tr>
<td>Notice</td>
<td>Right angle opposite to mounting hole A must be noticed. If right angle below 0.16/6.5, would affect nothing to fixing. Please notice burrs caused by inner wall of mounting holes.</td>
<td></td>
</tr>
<tr>
<td>Axial static load</td>
<td>8.63<del>9.8kN (880</del>1000kgf)</td>
<td>0.69<del>0.98kN (70</del>100kgf)</td>
</tr>
<tr>
<td>Remark</td>
<td>Simply and firmly locked</td>
<td>Locked and welded process</td>
</tr>
</tbody>
</table>

**Micrometer selection**

Points to selection are gauging range, shape of gauging plane, axis part, readable axis, and select micrometers as purposes.

**Gauging plane selection**

Shaft dimensions are designed by the size fit for assembly of micrometer and body set. Shaft diameter is used by allowable tolerance h6. As gauging instrument, generally used in plane type. As transferring device, sphere type could decrease errors caused by slanting of mounting portion of micrometer to minimum.