



Motorized Stage Series 2018



Motorized Stage Series



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GMT GLOBAL INC.

1	Support Units		7	Precision Alignment Stages	
2	Couplings		8	Motor / Driver	
3	Guides & Bearings		9	Lock Nuts	
4	Positioning Stages		10	Ball Screws	
5	Standard Motorized Stages		11	XY TABLE-Linear Stages	
6	Precision Motorized Stages		12	Linear Actuators	

Thanks for interesting in GMT Motorized Positioners.

In this catalogue, you will find our category 5, 6, 7, 8, 11, and 12 as shown in specified colors.

Category 1, 2, 3, 9, and 10 will be found in another catalogue Linear Motion Components.

Category 4 will be found in another catalogue Manual Positioners.

Most update product data will be available to be download from our website.



Great Motion Tech



GMT GLOBAL INC. Enthusiasm . United . Innovation . Brilliant

The best partner of Motion Technical, GMT, devote itself to research & development and design, system plan, as to production needs, try to be the best cooperate partner and reliable ally through coordination development with clients, to satisfy Automatic Equipment and Precision Measuring related industries. Choosing Made in Taiwan GMT products integrated to your products, safe and ease are secured.

GMT insists on core value "Service, Quality, R&D", and regard high technical and high precision product development as our mission, to stride toward to be the World-Class Precision Linear Motion Enterprise as our main goal.















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Standard Motorized Stages

Standard Motorized Stages-Product Information

◆ Specification Table : P.0025~P.0036

Standard Motorized Stages-Product Specification

Standard Motorized Stages X-Axis Crossed-roller guiding  AX□-A P.0029~P.0032	Standard Motorized Stages XY-Axis Crossed-roller guiding  AY□-A P.0033~P.0036	Standard Motorized Stages X-Axis Linear ball guiding  AX□-F P.0037~P.0040
Standard Motorized Stages X-Axis Linear ball guiding  AY□-F P.0041~P.0044	Standard Motorized Stages X-Axis Linear ball guiding  CXS□-S P.0045~P.0050	Standard Motorized Stages XY-Axis Linear ball guiding  CYS□-S P.0051~P.0056
Crossed-Roller Guiding X-Axis Circular linear ball guiding  CXN(C)□-S P.0057~P.0080	Crossed-Roller Guiding XY-Axis Circular linear ball guiding  CYN(C)□-S P.0081~P.0092	Standard Motorized Stages Z-Axis Linear ball guiding  AZV□-S P.0093~P.0096
Standard Motorized Stages α-Axis Goniometer Stage  AXG6□-CSW P.0097~P.0100	Standard Motorized Stages θ-Axis Bearing guiding  AR□-A P.0101~P.0104	Standard Motorized Stages 6-Axis Assembly application explanation (Axis & stroke)  Multiple axes P.0105

Standard Motorized Stages-Technical Information

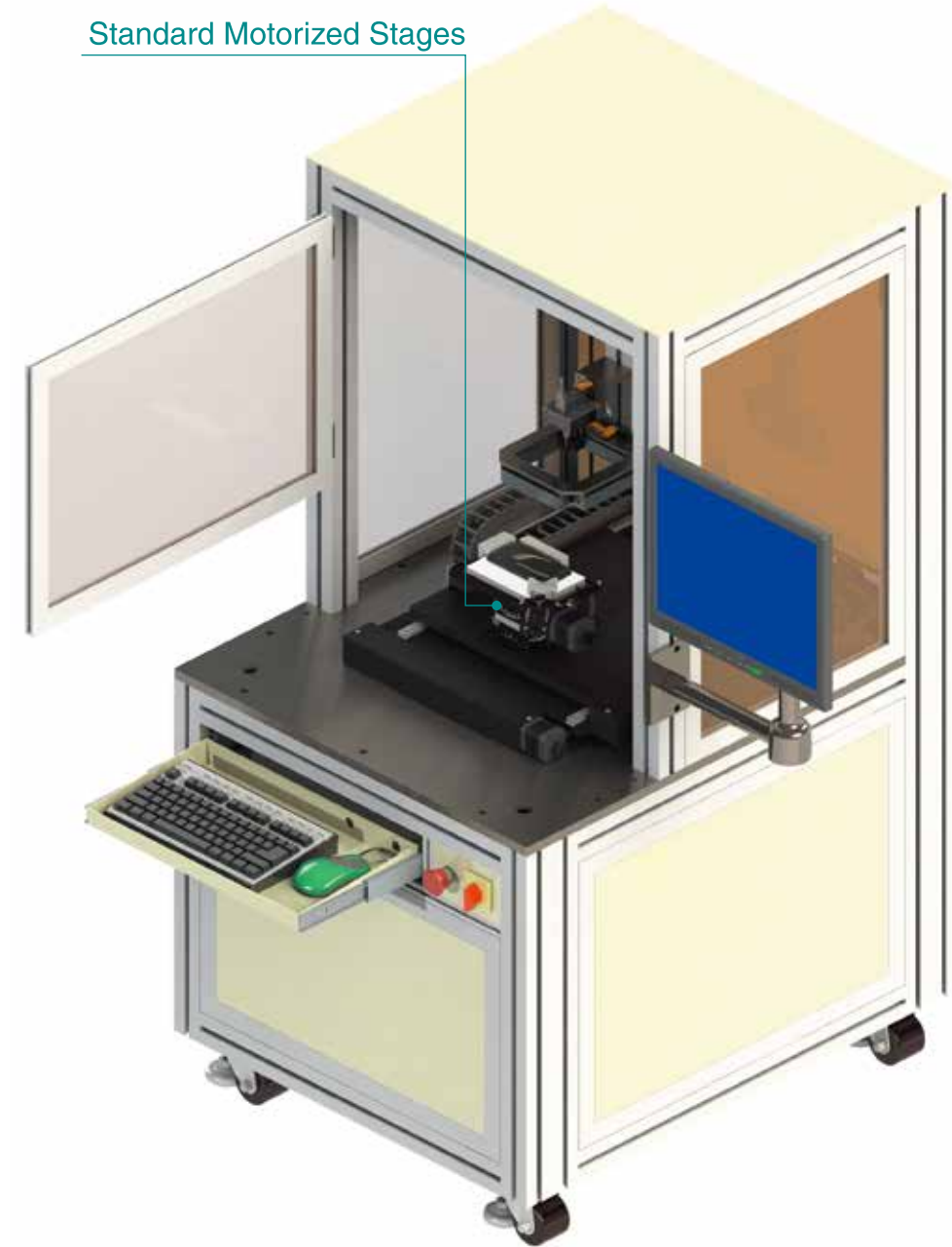
◆ Electrical Specifications : P.0107~P.0115

◆ Sepper Motor / Driver Cross-Reference Table: P.0117~P.0118

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Standard Motorized Stages

Standard Motorized Stages




















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Precision Motorized Stages

Precision Motorized Stages-Product Information












◆ Specification Table : P.0121~P.0126

Precision Motorized Stages-Product Specification

Precision Motorized Stages X-Axis Crossed-roller guiding  AX□-A P.0129~P.0132	Precision Motorized Stages XY-Axis Crossed-roller guiding  AY□-A P.0133~P.0136	Precision Motorized Stages Z-Axis Crossed-roller guiding  AZL□-A P.0137~P.0140
Precision Motorized Stages X-Axis Crossed-roller guiding  AXZ□-A P.0141~P.0144	Precision Motorized Stages X-Axis Crossed-roller guiding  AXYZ□-A P.0145~P.0148	Precision Motorized Stages XY-Axis Low-profile  AXL□-A P.0149~P.0152
Precision Motorized Stages XY-Axis Low-profile  AYL□-A P.0153~P.0156	Precision Motorized Stages X-Axis Hollow-profile  AXC□-A P.0157~P.0160	Precision Motorized Stages XY-Axis Hollow-profile  AYC□-A P.0161~P.0164
Precision Motorized Stages X-Axis Heavy loading  AXW□-F P.0165~P.0166	Precision Motorized Stages XY-Axis Heavy loading  AYW□-F P.0167~P.0168	Precision Motorized Stages X-Axis Linear ball guiding  CXS□-S P.0169~P.0174
Precision Motorized Stages XY-Axis Linear ball guiding  CYS□-S P.0175~P.0180	Precision Motorized Stages Z-Axis Linear ball guiding  CZLS□-S P.0181~P.0186	Precision Motorized Stages XZ-Axis Linear ball guiding  CXZS□-S P.0187~P.0192
Precision Motorized Stages XYZ-Axis Linear ball guiding  CXYZS□-S P.0193~P.0198	Precision Motorized Stages X-Axis Circular linear ball guiding  CXN(C)□-S P.0199~P.0214	Precision Motorized Stages X-Axis Circular linear ball guiding  CYN(C)□-S P.0215~P.0220

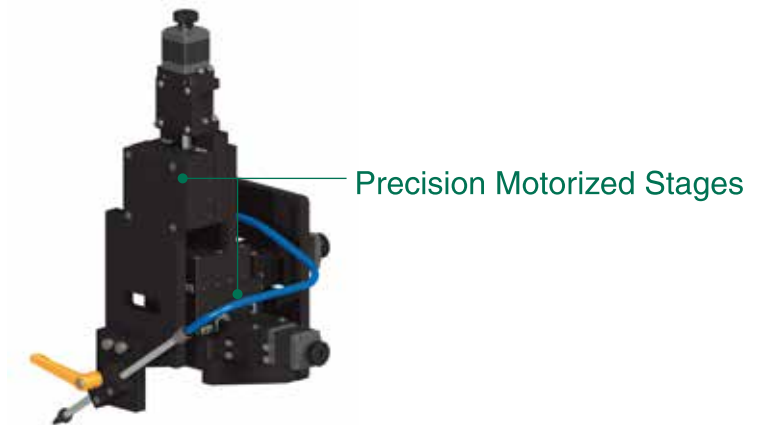
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Precision Motorized Stages

Precision Motorized Stages Z-Axis Circular linear ball guiding  CZLN(C)□-S P.0221~P.0226	Precision Motorized Stages XZ-Axis Circular linear ball guiding  CXZN(C)□-S P.0227~P.0232	Precision Motorized Stages XYZ-Axis Circular linear ball guiding  CXYZN(C)□-S P.0233~P.0238
Precision Motorized Stages Z-Axis Crossed-roller guiding Belt driven  AZV□-A P.0239~P.0240	Precision Motorized Stages θ-Axis Bearing guiding  AR□-A P.0241~P.0248	Precision Motorized Stages α-Axis Crossed-roller guiding  AXG□-A P.0249~P.0256
Hi-Resolution Precision Motorized Stages X-Axis Crossed-roller guiding  AYG□-A P.0249~P.0256	Hi-Resolution Precision Motorized Stages X-Axis Crossed-roller guiding  AX60□-A P.0257~P.0258	Hi-Resolution Precision Motorized Stages Z-Axis Crossed-roller guiding  AX7050-S P.0259~P.0260
Hi-Resolution Precision Motorized Stages Z-Axis Crossed-roller guiding  AZ7010-S P.0261~P.0262	Hi-Resolution Precision Motorized Stages Z-Axis Crossed-roller guiding  AZ60-A P.0263~P.0264	

Precision Motorized Stages-Technical Information

- ◆ Electrical Specifications : P.0267~P.0278
- ◆ Sepper Motor / Driver Cross-Reference Table : P.0279~P.0280
- ◆ Servo Motor / Driver Comparison Table & Driver Description : P.0281
- ◆ Electromagnetic Brake Type Stepper Motor Introduction : P.0283~P.0284



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Precision Alignment Stages

Precision Alignment Stages-Product Information

- ◆ Characteristics / Applications : P.0289
- ◆ Structures and Lubrication System : P.0290
- ◆ CC Series Installation Hole Reference : P.0291
- ◆ RS Series Installation Hole Reference : P.0292
- ◆ GAS00 Central Transmission Theory : P.0293
- ◆ GAS01 / GAS02 / GAS03 Central Transmission Theory : P.0294~P.0295
- ◆ Model No. Description : P.0297~P.0298

Precision Alignment Stages-Specification Comparison Form

- ◆ Specification Comparison of the GAS00 / GAS01 : P.0299
- ◆ Specification Comparison of the GAS02 / GAS03 : P.0300

Precision Alignment Stages-Product Specification

Driving / Driven Module Standard Type Central Transmission  GAU05 P.0303~P.0304	Driving / Driven Module Rigid Type Side Transmission  GAU05 P.0305~P.0306	Driving / Driven Module Standard Type Central Transmission  GAU10 P.0307~P.0308
Driving / Driven Module Rigid Type Side Transmission  GAU10 P.0309~P.0310	Driving / Driven Module Standard Type Central Transmission  GAU12 P.0311~P.0312	Driving / Driven Module Rigid Type Central Transmission  GAU12 P.0313~P.0314
Driving / Driven Module Rigid Type Central Transmission  GAU12 P.0315~P.0316	Precision Alignment Stages Travel Stroke $\pm 3 \times \pm 3, \pm 2^\circ$  GAS00-160LC P.0317	Precision Alignment Stages Travel Stroke $\pm 4 \times \pm 4, \pm 3^\circ$  GAS00-190HC P.0318
Precision Alignment Stages Travel Stroke $\pm 4 \times \pm 4, \pm 3^\circ$  GAS00-200HC P.0319	Precision Alignment Stages Travel Stroke $\pm 5 \times \pm 5, \pm 3^\circ$  GAS01-250CC P.0320	Precision Alignment Stages Travel Stroke $\pm 5 \times \pm 5, \pm 3^\circ$  GAS01-250RS P.0321

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Precision Alignment Stages

Precision Alignment Stages Travel Stroke $\pm 5 \times \pm 5, \pm 2^\circ$  GAS01-350CC P.0322	Precision Alignment Stages Travel Stroke $\pm 5 \times \pm 5, \pm 2^\circ$  GAS01-350RS P.0323	Precision Alignment Stages Travel Stroke $\pm 10 \times \pm 10, \pm 3.5^\circ$  GAS02-400RS P.0324
Precision Alignment Stages Travel Stroke $\pm 10 \times \pm 10, \pm 3.5^\circ$  GAS02-400CC P.0325	Precision Alignment Stages Travel Stroke $\pm 5 \times \pm 5, \pm 2^\circ$  GAS02-500CC P.0326	Precision Alignment Stages Travel Stroke $\pm 10 \times \pm 10, \pm 3.5^\circ$  GAS02-500RS P.0327
Precision Alignment Stages Travel Stroke $\pm 10 \times \pm 10, \pm 1.5^\circ$  GAS02-750CC P.0328	Precision Alignment Stages Travel Stroke $\pm 10 \times \pm 10, \pm 1.5^\circ$  GAS02-750RS P.0329	Precision Alignment Stages Travel Stroke $\pm 10 \times \pm 10, \pm 2^\circ$  GAS03-1000CC P.0330
Precision Alignment Stages Travel Stroke $\pm 15 \times \pm 15, \pm 2^\circ$  GAS03-1000RS P.0331	Precision Alignment Stages Travel Stroke $15 \times \pm 15, \pm 1^\circ$  GAS03-1500CC P.0332	Precision Alignment Stages Travel Stroke $\pm 15 \times \pm 15, \pm 1^\circ$  GAS03-1500RS P.0333
Precision Alignment Stages Travel Stroke $\pm 10 \times \pm 10, \pm 3^\circ$  GAS00-320SC P.0334	Precision Alignment Stages Travel Stroke $10 \times \pm 10, \pm 3^\circ$  GAS00-320WC P.0335	

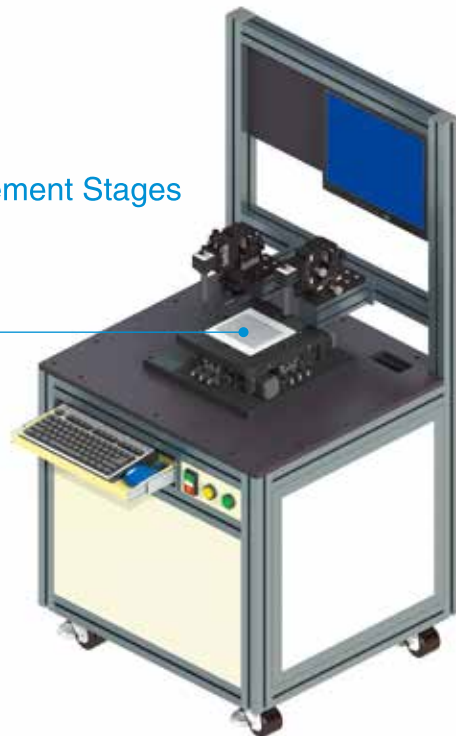
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Precision Alignment Stages

Precision Alignment Stages-Technical Information






















- ◆ Motor & Driver Comparison Reference : P.0339
- ◆ Servo Motor / Driver Comparison Reference Table : P.0340~P.0342
- ◆ Sensor and Block Layout / Sequencer Diagram : P.0343
- ◆ Home Point Return Instruction : P.0344
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- ◆ Inspection Method : P.0346
- ◆ 3D Measurement : P.0347
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- ◆ Motor Installation - CC Series : P.0350
- ◆ Motor Disassembly & Assembly Description - RS Series : P.0351~P.0352
- ◆ Motor Installation - RS Series : P.0353
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- ◆ GAS01 / GAS02 / GAS03 Feeding Calculation Formula : P.0356~P.0359
- ◆ Feeding Calculation Formula Examples : P.0360

Precision Alignment Stages









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Motor / Driver

GMT □20(NEMA8) 2 - Phase Stepper Motor  □2MS-N20 P.0367~P.0368	GMT □28(NEMA11) 2 - Phase Stepper Motor  □2MS-N28 P.0369~P.0370	GMT □35(NEMA14) 2 - Phase Stepper Motor  □2MS-N35 P.0371~P.0372
GMT □42(NEMA17) 2 - Phase Stepper Motor  □2MS-N42 P.0373~P.0374	GMT □57(NEMA23) 2 - Phase Stepper Motor  □2MS-N57 P.0375~P.0376	Sanyo □28(NEMA11) 2 - Phase Stepper Motor  SH228□-52□1 P.0377~P.0378
Sanyo □35(NEMA14) 2 - Phase Stepper Motor  SH35□□-12U□0 P.0379~P.0380	Sanyo □42(NEMA17) 2 - Phase Stepper Motor  103H52□□-04□□ P.0381~P.0382	Sanyo □28 5 - Phase Stepper Motor  SH528□-72□1 P.0383~P.0384
Sanyo □39 5 - Phase Stepper Motor  103-450□-70□0 P.0385~P.0386	Sanyo □42 5 - Phase Stepper Motor  103F55□-52□1 P.0387~P.0388	Oriental Motor □20 2 - Phase Stepper Motor  CVK213□K P.0389~P.0390
Oriental Motor □28 2 - Phase Stepper Motor  CVK22□□K P.0391~P.0392	Oriental Motor □35 2 - Phase Stepper Motor  CVK23□□K P.0393~P.0394	Oriental Motor □42 2 - Phase Stepper Motor  CVK24□□K P.0395~P.0396
Oriental Motor □60 2 - Phase Stepper Motor  CVK26□□K P.0397~P.0398	Oriental Motor □28 5 - Phase Stepper Motor  CVK52□□K P.0399~P.0400	Oriental Motor □42 5 - Phase Stepper Motor  CVK54□□K P.0401~P.0402
Oriental Motor □60 5 - Phase Stepper Motor  CVK56□□K P.0403~P.0404	Oriental Motor □42 5 - Phase Stepper Motor  CVK54□M□K P.0405~P.0406	Oriental Motor □60 5 - Phase Stepper Motor  CVK56□FMN24□ P.0407~P.0408

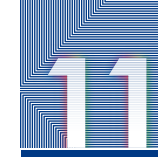
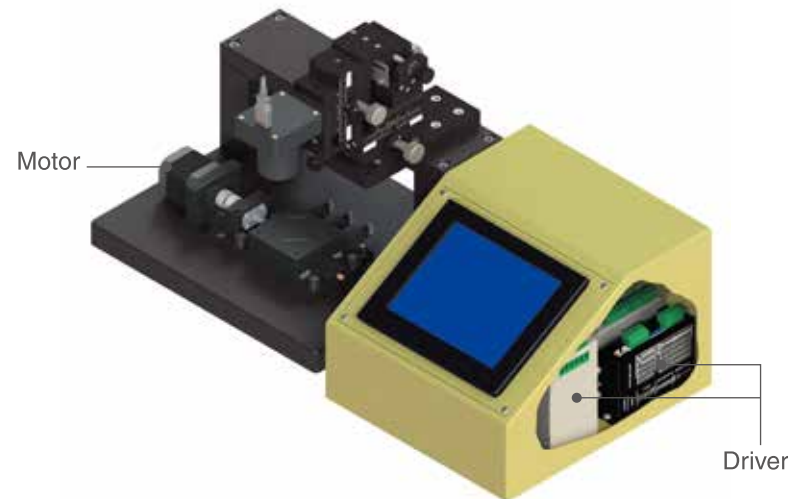


Motor / Driver

<p>MITSUBISHI</p> <p>Servo Motor / Driver</p> <p>HG-KR(□)□□ MR-J4-□0A</p> <p>P.0402</p>	<p>YASKAWA</p> <p>Servo Motor / Driver</p> <p>SGMAV-□□ADA61 SGDV-(□)R□(□)A01</p> <p>P.0403</p>	<p>PANASONIC</p> <p>Servo Motor / Driver</p> <p>MSMD□□□G1S MADHT15□□</p> <p>P.0404</p>
<p>Feedback</p> <p>Stepper Motor</p>  <p>FB28,FB42 P.0389~P.0390</p>	<p>Electromagnetic Brake □28,□35,□42</p> <p>Stepper Motor</p>  <p>GAS03-1500RS P.0391~P.0392</p>	<p>GMT</p> <p>2 - Phase Bipolar Micro Stepper Motor Driver</p>  <p>GTR22G-D P.0393~P.0394</p>
<p>GMT</p> <p>2 - Phase Unipolar Micro Stepper Motor Driver</p>  <p>GTR24M3 P.0395~P.0396</p>	<p>GMT</p> <p>5 - Phase Half / Full Stepper Motor Driver</p>  <p>GTR515B P.0397~P.0398</p>	<p>GMT</p> <p>5 - Phase Micro - Step Stepper Motor Driver</p>  <p>GTR514H-D P.0399~P.0400</p>
<p>Delta</p> <p>Servo Motor / Driver</p> <p>ECMA-C□□□□□ES ASD-□2-0□21-□</p> <p>P.0401</p>		

Motor / Driver-Product Information

- ◆Connecting cable : P.0407~P.0408
- ◆Motor / driver cross-reference table : P.0409



XY Table-Linear Motion Stages

- XY Table-Linear Motion Stages-Product Information**
- ◆Model No. Description : P.0428
 - ◆Product Characteristic : P.0429
 - ◆Product Selection : P.0430
 - ◆Limited Element Analysis : P.0431~P.0412

XY Table-Linear Motion Stages-Product Specification

<p>Precision Level</p> <p>X-Axis</p>  <p>GX□-□□P P.0435~P.0440</p>	<p>Precision Level</p> <p>X-Axis Bellows</p>  <p>GX□-□J□P P.0435~P.0440</p>	<p>Precision Level</p> <p>XY-Axis</p>  <p>GXY□-□□P P.0441~P.0446</p>
<p>Precision Level</p> <p>XY-Axis Bellows</p>  <p>GXY□-□J□P P.0441~P.0446</p>	<p>Standard Level</p> <p>X-Axis</p>  <p>GX□-□□R P.0447~P.0452</p>	<p>Standard Level</p> <p>X-Axis Bellows</p>  <p>GX□-□J□R P.0447~P.0452</p>
<p>Standard Level</p> <p>XY-Axis</p>  <p>GXY□-□□R P.0453~P.0458</p>	<p>Standard Level</p> <p>XY-Axis Bellows</p>  <p>GXY□-□J□R P.0453~P.0458</p>	

XY Table-Linear Motion Stages-Technical Information

- ◆Connection comparison list for servo motor : P.0461
- ◆Positioning control : P.0462
- ◆Motor introduction : P.0463
- ◆Resolution & speed : P.0464
- ◆Life calculation of linear guide : P.0465~P.0467
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Linear Actuators-Product Information

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- ◆ Model Selection Steps : P.0472
- ◆ Model Number of GKA/S series : P.0473
- ◆ Accuracy Grade : P.0474
- ◆ Maximum Speed Limit : P.0475
- ◆ Loading Specifications : P.0476

Linear Actuators-Product Specification

<p>Linear Actuators</p> <p>X-Axis Circular linear ball guiding</p>  <p>GK□-3065 P.0479</p>	<p>Linear Actuators</p> <p>X-Axis Circular linear ball guiding w / Dustproof cover</p>  <p>GK□-3065 P.0480</p>	<p>Linear Actuators</p> <p>X-Axis Circular linear ball guiding</p>  <p>GK□-4270 P.0481</p>
<p>Linear Actuators</p> <p>X-Axis Circular linear ball guiding w / Dustproof cover</p>  <p>GK□-4270 P.0482</p>	<p>Linear Actuators</p> <p>X-Axis Circular linear ball guiding</p>  <p>GK□-5496 P.0483</p>	<p>Linear Actuators</p> <p>X-Axis Circular linear ball guiding w / Dustproof cover</p>  <p>GK□-5496 P.0484</p>
<p>Linear Actuators</p> <p>X-Axis Circular linear ball guiding</p>  <p>GK□-60110 P.0485</p>	<p>Linear Actuators</p> <p>X-Axis Circular linear ball guiding w / Dustproof cover</p>  <p>GK□-60110 P.0486</p>	

Linear Actuators-Accessories Information

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- ◆ Motor mount bases and adapt mountings : P.0488
- ◆ Stepper motor mount bases and adapt mountings : P.0489~P.0490
- ◆ Servo motor mount bases and adapt mountings : P.0491~P.0494
- ◆ Coupling selection : P.0495
- ◆ Sensor rail installation diagrams : P.0496
- ◆ Sensor set : P.0497
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Linear Actuators-Technical Information

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Motorized Positioners-Precautions

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- ◆ Installation & environment precautions : P.0018
- ◆ Installation precautions : P.0019
- ◆ Warranty instructions & troubleshooting suggestions : P.0020

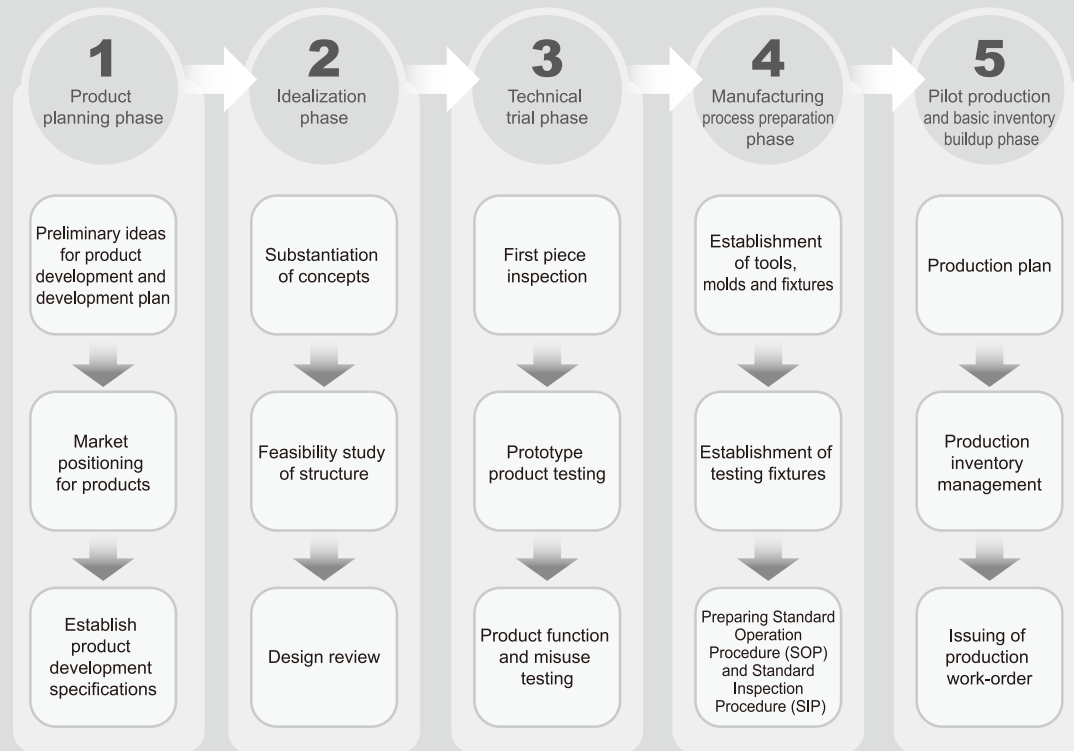
Motorized Positioners-Product Information

- ◆ System configuration diagram : P.0021
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Motorized Positioners-Technical Information

- ◆ Reference Table of Basic Shaft Fitting / Bore Fitting : P.0519
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Innovative Thinking · Rigorous Process · Reliable Quality



This is a precision product. For operating properly, please be familiar with the following precautions before using it.

Unpacking Precautions

Before unpacking, please check the appearance for damage, loose screws or components. If there are concerns about structure and appearance, please take photographs as evidence and e-mailed to the responsible unit.

When the packages arrive, please 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 responsible unit.



Safety Precautions

Before placement and use, please make sure that there is sufficient working space around to prevent the possibility of falling and rolling.
→ CAUTION: A violation may result in personal injuries or product damage.

For safe installations and operations, please follow the electrical safety instructions. Do not use in any explosive, flammable, corrosive, humid environments or wet conditions nor near to such materials. Otherwise, there would be risks of fire and electric shocks.
→ CAUTION: A violation may result in serious personal injuries or product damage.

Please always check that whether the movement space of the motors and mechanisms is enough in operations, and avoid any body parts or clothing accessories being close of / entering into the working areas of the stages. It otherwise will cause dangers as rolling, pinching, and pulling.
→ CAUTION: A violation may result in personal injuries or product damage.

Please turn off the power before starting maintenance to prevent the danger as an electric shock.
→ CAUTION: A violation may result in serious personal injuries or product damage.

If the product is used in a vertical direction as Z-axis, please use safety devices to prevent slides or power interruptions are caused due to an overload.
→ CAUTION: A violation may result in personal injuries or product damage.



Installation Precautions

If any unusual situations arise in operations (such as unusual sounds and vibrations), please immediately stop the machine.
→ CAUTION: A violation may result in personal injuries or product damage.

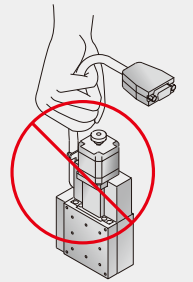
Do not forcibly pull or bend any electric wires and follow the wiring diagram for correct wiring.
→ CAUTION: A violation may result in personal injuries or product damage.

For tightening screws, please use a torque wrench corresponds to specifications of the screws.
→ CAUTION: A violation may cause loosening.

Please do not allow the setting of machine speed to exceed the maximum default speed, and avoid extreme changes of the setting and parameters.
→ CAUTION: A violation may result in personal injuries or product damage.

If any malfunctions or damage arise, please do not continue the use.
→ CAUTION: A violation may result in personal injuries or product damage.

Please make sure the wiring and connections of electric equipment are secured and the parameters are set correctly.
→ CAUTION: A violation may cause fire, electric shocks, personal injuries or product damage.



Environment Precautions

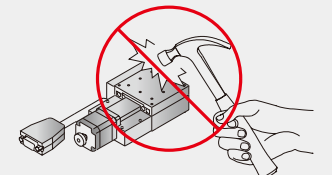
If any foreign objects such as dust or metal powder that enters into the screws or slide rails, it may reduce the product life and cause abnormal wears of products.
→ CAUTION: If any concerns exist, please implement the dust control measures.

Once the product is used as a mechanical processing standard, it may affect the life, performances and precision.
→ CAUTION: For this case, please have the installation be on a reliably rigid base.

The product is designed and planned to operate in the specified directions mentioned in the catalog. Please check with GMT if other directions will be applied.
→ CAUTION: If the product is used beyond the usage of horizontal directions, it will reduce the life and increase the probability of malfunctions.

Before installing our products, please make sure there are no unnecessary objects in the area, and use alcohol for cleaning to prevent for losing precision of the installation.
→ CAUTION: A violation may cause the product precision unable to match the specifications marked on the catalog.

Do not apply any inappropriate forces on or strike the product to prevent damage and the loss of precision and warranties.
→ CAUTION: A violation may cause the product precision unable to match the specifications marked on the catalog.



Please do not turn off the travel stroke limitation sensors during the operation, it otherwise will cause the deactivations of the sensors, and do not overuse the travel strokes while turning the knob on the back of the motors.

→ CAUTION: A violation may result in personal injuries or product damage.

While installing the peripheral mechanisms on the upper / lower board of the stage, please have the stage horizontally fixed and then make sure the flatness and the inclination angle of the mounting surface is within 0.01mm and 1° respectively to prevent for the arising of poor precision due to the deformations of the stage.

→ CAUTION: A violation may result in personal injuries or product damage.

Do not remove any parts of the precision motorized stage arbitrarily to prevent the loss of precision and warranties. If a service is needed, please contact our salespersons.

→ CAUTION: A violation may cause damage on product and the precision unable to match the specifications marked on the catalog.

If any screw holes do not fit or need additional screw holes, please contact our salespersons and do not handle it by self to guarantee the precision and warranties.

→ CAUTION: A violation may cause damage on product and the precision unable to match the specifications marked on the catalog.

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

→ CAUTION: A violation may cause damage on product and the precision unable to match the specifications marked on the catalog.

Installation Procedures:

1. Please make sure there is no flash, dust, or dent on the installation surface.
2. Please put the product on the installation surface.
3. The screw holes should be aligned with the ones located on the installation surface.
4. It is suggested to use the screws according to the compliances of the standard specifications.
5. Use a torque wrench to tighten screws.

Precautions for product use environments:

Transporting temperature	-10°C ~ 70°C
Transporting humidity	below 90%RH (non-condensing)
Installation temperature	0°C ~ 40°C
Installation humidity	below 20% ~ 80%RH (non-condensing)
Environmental gases	It must not contain any corrosive, flammable gas, oil mist or dust indoors.

→ Within a warranty period, if any following failures occur, our company will be responsible for the repair.

→ The product is warranted for one year, and is started from when the product is delivered to the designated place.



→ If any mention below occurs, it will not be covered under warranty:

1. The damage caused by using the product in any unspecified environments or methods.
2. The damage caused by unauthorized modifications or repairs.
3. The damage caused by natural disasters or misuses.
4. The damage caused after the purchase due to the careless uses or motions.
5. The malfunctions or damage caused by unauthorized connections with the other machines.
6. The malfunctions or damage caused by the violations of precautions and instructions.

→ If the motors or mechanisms are hit by the external forces, please check whether the properties of screws are in normal.

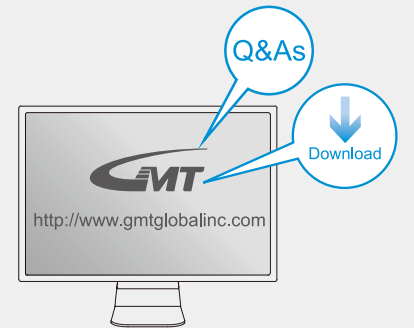
→ Please do not arbitrarily adjust the positions of the origin and both left and right limits to prevent the collisions of machines and the loss of warranties.

→ The wires and receptacles of limit switches must be secured to prevent loosening.

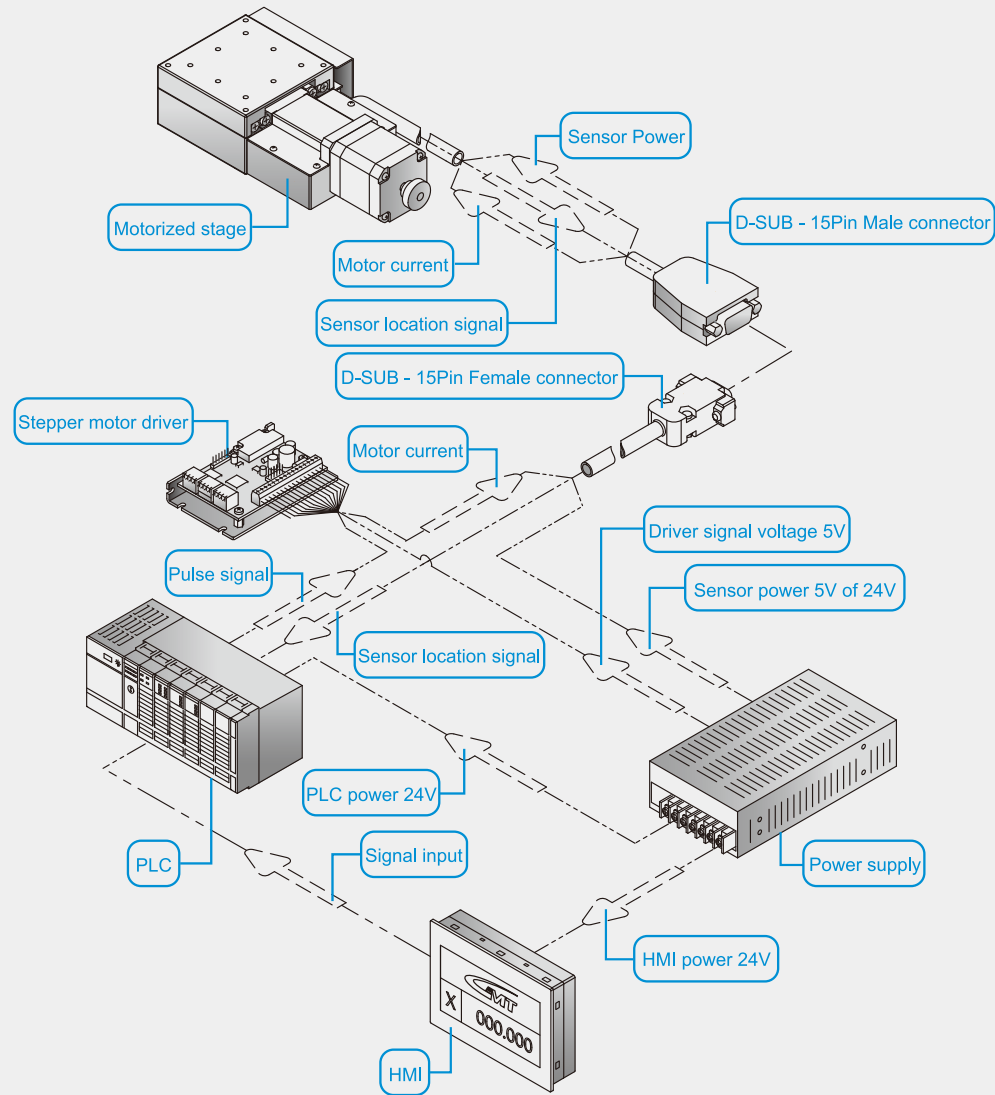
→ Do not arbitrarily loosen the couplings and transmission structures to guarantee the precision and warranties.

→ If any unusual noises or vibrations of the machines occur in operations, for safety, please turn off the power first.

→ To see Q&As regarding to the product, please visit our GMT website.



System Configuration Diagram



- For detailed specifications, please read the descriptions of the stage and connecting cables on page 0491~0492.
- For selections of the applying drivers preferred, please refer to the cross-reference tables on page 0117~0118, 0279~0280. for the motor / driver of the precision motorized stage and the GMT motor and driver catalog.
- All of the drivers chosen are the specifications of GMT preferred. For different needs, please choose the suitable drivers according to real functional needs.

Axis Definition

GMT has defined different axis as the following figuration according to the movement direction:
 Horizontal movement direction is X and Y-Axis.
 Vertical movement direction is Z-Axis.
 Movement around X, Y, Z-Axis is defined to α -Axis, β -Axis, and θ -Axis.
 Green arrows present the specified Axis movement direction.

X-Axis 	AX 	XY-Axis 	AY
Z-Axis 	AZL 	AZV 	AZ
XZ-Axis 	AXZ 	XYZ-Axis 	AXYZ
α-Axis 	AXG 	$\alpha\beta$-Axis 	AYG
θ-Axis 	AR 		