GENERAL CATALOG

Standard AC Motors

Speed Control Systems

Stepping Motors

Linear and Rotary Actuators

Cooling Fans

2009
2010

Orientalmotor

Oriental Motor answers diverse customer needs with field-proven technology and a wide range of products.

Being the first motor manufacturer in Japan to offer standardized compact motors, Oriental Motor has continued its commitment to innovation and has expanded its fields of technical expertise. We have created industry-standard motors for power and control.
Oriental Motor has also actively developed products conforming to major safety standards, such as the UL, CSA and EN Standards and CE Marking, as well as the RoHS Directive. Oriental Motor is proud to offer nearly 11,000 different products, each perfected to meet the specific needs of customers across many industries.
These standard products are classified into five categories.

Standard AC Motors

Standard AC motors operate by simply connecting a capacitor and supplying power from a commercial power supply. Standard AC motors include the basic induction motor and reversible motor. In addition, Oriental Motor offers electromagnetic brake motors, synchronous motors, torque motors and watertight, dust-resistant motors to meet specific application requirements.

- Constant Speed Motors
  - Induction Motors
  - Reversible Motors
  - Electromagnetic Brake Motors
  - Clutch and Brake Motors
  - Synchronous Motors
  - Low-Speed Synchronous Motors
- Watertight, Dust-Resistant Motors
- Torque Motors
- Gearheads
  - Parallel Gearheads
  - Right-Angle Gearhead, Hollow Shaft
  - Right-Angle Gearhead, Solid Shaft
- Linear Heads
- Brake Pack
- Accessories

Stepping Motors

Stepping motors are used to achieve precise positioning via digital control. The motor operates by accurately synchronizing with the pulse signal output from the controller to the driver. Stepping motors, with their ability to produce high torque at a low speed while minimizing vibration, are ideal for applications requiring quick positioning over a short distance.

- Closed Loop Stepping Motor and Driver Package αSTEP
  - AC Input/DC Input
- 5-Phase Stepping Motor and Driver Package
  - AC Input/DC Input
- 2-Phase Stepping Motor and Driver Package
  - AC Input/DC Input
- 2-Phase Stepping Motors
- Controllers
- Accessories

Speed Control Systems

Speed control systems are ideal for applications that require the precise control of speed. Motors for speed control systems can be either highly efficient brushless motors or simple-to-use AC motors.

- Brushless Motor Systems
  - AC Input/DC Input
- AC Motor Systems
- Accessories

Linear and Rotary Actuators

A linear-motion product incorporating a motor and a linear-motion mechanism. Drawing on our expertise as a motor manufacturer, Oriental Motor offers a wide range of linear-motion products in various shapes and sizes, featuring different motor types, drive methods and power inputs.
We assure the overall performance of each actuator and driver package.

- Motorized Linear Slides
- Motorized Cylinders
- Compact Linear Actuators
- Hollow Rotary Actuators
- Accessories

Cooling Fans

Oriental Motor offers a wide range of cooling fans, including a cooling module suitable for enclosure cooling, axial flow fans ideal for ventilation cooling, centrifugal blowers and cross flow fans for local cooling, as well as fans with low-speed or stall alarms, or variable flow type.

- Cooling Module
- Axial Flow Fans
- Centrifugal Blowers
- Cross Flow Fans
- Thermostats
- Accessories

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General Information

Scope of Intended Applications

Our products are designed and manufactured for use in general industrial applications. They are not intended for use in nuclear power generation, aerospace, railway, vehicle, entertainment machinery, safety equipment, medical equipment or any other application having a significant effect on human life or property.
If you intend to use our products in any of the above non-intended applications, please consult us regarding the specific application and operating environment before doing so. We must remind you, however, that our warranty only covers the items specified under "warranty and limitation of liability."

Safety Precautions

Before using any product, carefully read the "operating manual" to ensure correct operation.

Return, Replacement and Repair After Delivery

- ORIENTAL MOTOR U.S.A. CORP. is confident that you will be completely satisfied with your purchase. In the unlikely event that a delivered product has been damaged during shipping or if you receive an incorrect order, ORIENTAL MOTOR U.S.A. CORP. will correct the problem. Please contact your local sales office or distributor where the product was purchased.
- If you need to return a product because of a technical issue, please contact ORIENTAL MOTOR U.S.A. CORP. technical support at 1-800-468-3982 to try to determine the cause of the problem. If your problem cannot be resolved, you will receive instructions on how to obtain an RMA number and how to return the product.
- ORIENTAL MOTOR U.S.A. CORP. also offers a repair service for a nominal charge. Please contact your local sales office or distributor to receive an RMA number and instructions on how to send in the product if you wish to request a repair quotation.

Specification Change

The model names, specifications, appearances and other details of products featured in this catalog are subject to change without notice for purposes of improvement. Before you examine or order any product featured in the catalog, we recommend that you check with our sales office to confirm that the stated information is valid.

Delivery Times

Many Oriental Motor products are available for "same day" shipping in certain quantities. For more details on availability and delivery times for particular products, please contact your local Oriental Motor Customer Service Center.

Placing an order:

There are several ways to place an order with Oriental Motor:

- Call our Customer Service Centers @1-800-418-7903
- E-mail our Customer Service Centers by using the following e-mail addresses:
  - ◇Westcoastorders@orientalmotor.com (Los Angeles Sales Office)
  - ◇Midwestorders@orientalmotor.com (Chicago Sales Office)
  - ◇Eastcoastorders@orientalmotor.com (Boston Sales Office)
- Visit our Website (www.orientalmotor.com) for product specifications, to download CAD or PDF files and to purchase products. Please note that not all Oriental Motor products are available to order through the web.

- Oriental Motor accepts MasterCard, Visa and American Express. After your first order, you can apply to set up a terms account for future orders by contacting your local Customer Service Center.

Warranty and Limitation of Liability

●Warranty

Oriental Motor U.S.A. Corporation (the "Company") warrants to the first end user Buyer that the products and parts thereof, when shipped will be free from defects in materials comprising the same and in the Company's workmanship. If any such defects exist or later appear, the Company shall undertake, at its sole expense, prompt remedial action as stated herein to correct the same; provided however, that the Company shall have no obligation or liability under this warranty unless it shall have received written notice specifying such defects no later than two (2) years from the date of shipment. Remedial action under this warranty shall require only that the Company, at its option, repair or modify the products or parts thereof, replace the same F.O.B. point of origin or except the return of the products or parts thereof by Buyer and refund the purchase price.

Products or parts thereof, manufactured by others are warranted hereunder only to the extent of such manufacturer's warranty to the Company.

Since after the shipment, the products and parts thereof are under the sole control of the Buyer, this warranty is subject to, and shall be applicable only if the following conditions are met;

①The Company's instructions as to installation, operation and maintenance have been followed.

②The products and parts thereof have been used under normal operating conditions or under such conditions as herein before specified by the Company, or specified by the Buyer and agreed to in writing by the Company.

③The products and parts thereof have been erected, installed, operated and maintained and have not been affected by misuse, neglect or accident.

④The Buyer has not attempted or performed corrective work or modification on the products and/or parts thereof without the Companies prior written consent as to the nature and expense thereof.

⑤The Company shall have received notice of any defect no later than thirty (30) days after the Buyer first had knowledge of the same; and

⑥Within the warranty period and after prior authorization from the Company, the products and/or parts are shipped freight prepaid to the Company at 1001 Knox Street, Torrance, CA. 90502.

THE FOREGOING WARRANTY IS IN SUBSTITUTION FOR, AND IN LIEU OF ANY AND ALL OTHER WARRANTIES, EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

●LIMITATION OF WARRANTY

THE COMPANY SHALL HAVE NO LIABILITY WHATSOEVER IN ANY EVENT FOR PAYMENT OF ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING WITHOUT LIMITATION, DAMAGES FOR INJURY TO ANY PERSON OR PROPERTY. BY ACCEPTING THE PRODUCTS AND/OR PARTS THEREOF, THE FIRST END USER BUYER OR SUBSEQUENT USER AGREES THAT THE COMPANY SHALL NOT BE LIABLE FOR INDEMIFICATION OR CONTRIBUTION (IN WHOLE OR IN PART) EITHER EXPRESSLY OR BY IMPLICATION. IF FOR ANY REASON OF THE FOREGOING PROVISIONS SHALL BE INEFFECTIVE, THE COMPANY'S LIABILITY FOR DAMAGES ARISING OUT OF ITS MANUFACTURE OR SALE OF ITS PRODUCTS OR PARTS, OR USE THEREOF, WHETHER SUCH LIABILITY IS BASED ON WARRANTY, CONTRACT, NEGLIGENCE, STRICT LIABILITY IN TORT OR OTHERWISE, SHALL NOT IN ANY EVENT EXCEED THE FULL PURCHASE PRICE OF SUCH PRODUCTS AND PARTS THEREOF.

Any action against the Company based upon any liability or obligation arising hereunder any law applicable to the sale or its products or parts thereof, or the use thereof, must be commenced within two (2) years after the cause of such actions arises.

North American Sales and Customer Service

Western Sales and Customer Service Center
Tel: (310) 715-3301
Fax: (310) 225-2594

Los Angeles
Tel: (310) 715-3301

San Jose
Tel: (408) 392-9735

Midwest Sales and Customer Service Center
Tel: (847) 285-5100
Fax: (847) 843-4121

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Fax: (781) 848-2617

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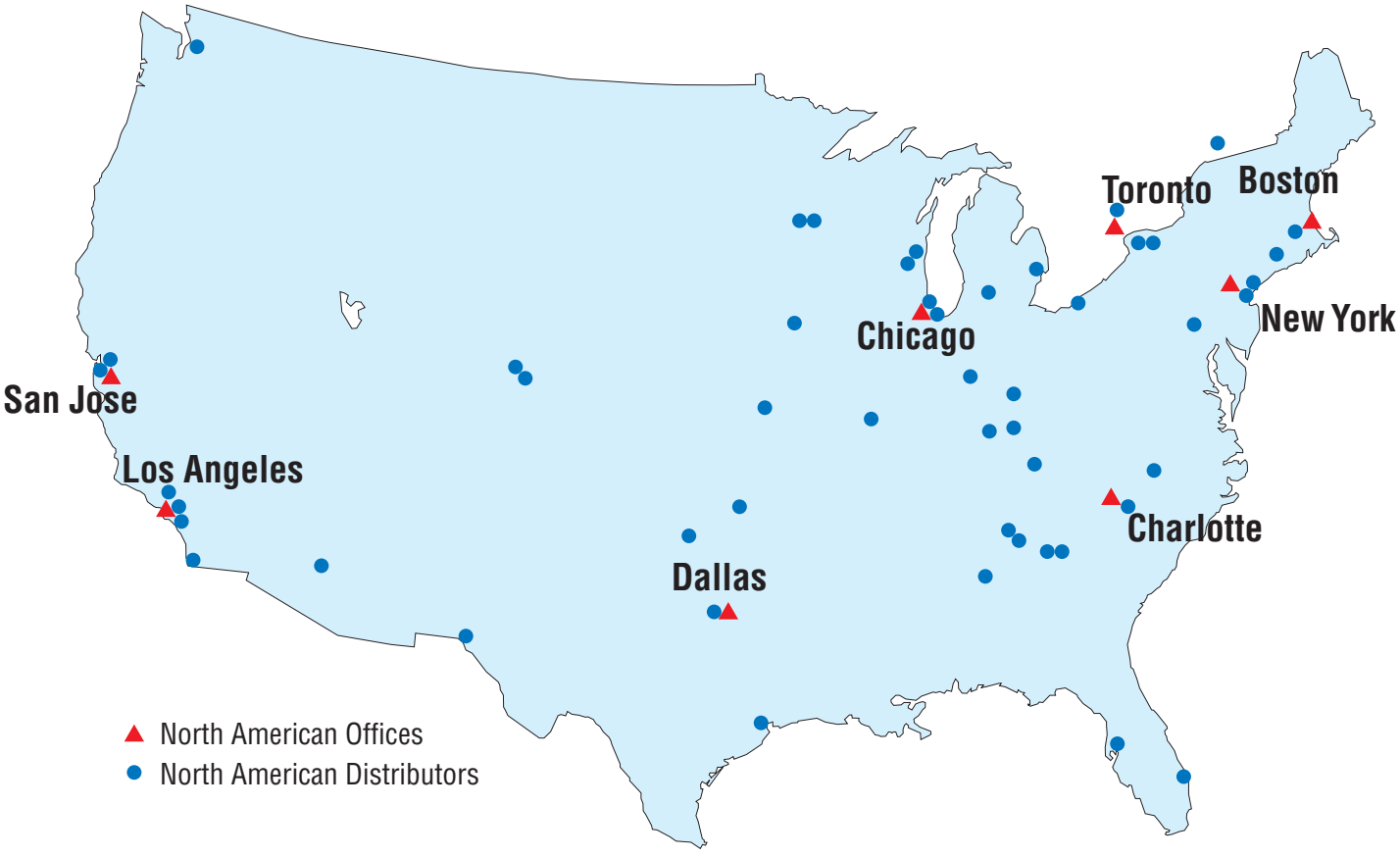
Tel: (781) 848-2426

Charlotte
Tel: (704) 696-1036

New York
Tel: (973) 359-1100



www.orientalmotor.com

Why Choose ORIENTAL MOTOR?

Products and technology are only valuable when coupled with skilled people and service to support them. ORIENTAL MOTOR USA Corporation has dedicated over 20 years to establishing a service and support system to better serve our customers. It is our goal to provide the best product and service from the design phase, through the sale and after the sale. Please call on us to meet your motion systems needs.

Website

Orientalmotor.com is your online source for the latest products, information and announcements from ORIENTAL MOTOR. There you can view complete product specifications, download CAD, product literature, operator manuals and even place an order online (limited to quantities of 10 or less). In addition, our website features a number of powerful tools including the ability to search for products by part number, keyword or specification and compare up to five products side-by-side. You can also find the right product for your application by viewing our animated application examples or using the Interactive Motor Selection Guide. Visit www.orientalmotor.com today to discover the latest in motion systems from ORIENTAL MOTOR.

Motor Fair & Seminars

ORIENTAL MOTOR provides a high quality information sharing event to teach customers more about motion systems. Product displays, new products or technologies, a variety of seminars, and one-on-one discussions with engineers are available throughout the day. The event travels to a number of different cities throughout North America. Contact ORIENTAL MOTOR for a show near you.

Technical Seminars

ORIENTAL MOTOR offers free, personalized training at your location, our location, or through a distributor. These seminars can be tailored according to your needs.

Quality

ORIENTAL MOTOR provides 100% quality control throughout a unique manufacturing process. This process incorporates quality checks on every item after every manufacturing process, from parts acceptance to the finished product. Every ORIENTAL MOTOR product undergoes reliability testing before it is released to the market. These tests subject the product to the harshest of operating conditions and intentional misuse to discover the limits of their durability. ORIENTAL MOTOR factories have obtained ISO 9000 certification, demonstrating the high level of quality inherent to ORIENTAL MOTOR's processes.

800 Technical Support

One phone call provides you direct access to ORIENTAL MOTOR's motion systems experts. ORIENTAL MOTOR's technical support team is qualified to answer a wide variety of questions. Call toll free 1-800-GO-VEXTA (468-3982) to speak with an ORIENTAL MOTOR associate, or e-mail techsupport@orientalmotor.com.

Sizing & Selection

ORIENTAL MOTOR's Application Engineering Group can support you in finding the proper motion control product for your application. Call, e-mail or fax an ORIENTAL MOTOR associate with your requirements for assistance in finding the proper solution.

Engineering & Application Engineering

Qualified technical associates are available to assist you with your technical problems or questions. Application engineers are available to visit your site if needed. These engineers are also dedicated to continuous research and development of new products and technologies.

Global Support

ORIENTAL MOTOR has sales offices, as well as manufacturing, assembly and distribution facilities, worldwide to support your international needs. Products are available with input voltages and safety standard certifications to meet international requirements. Research and development of new products is conducted at all product plants in Japan, as well as in the United States. With R&D on a global scale, ORIENTAL MOTOR gains different perspectives into marketing expansion and customer requirements, resulting in the development of state-of-the-art technology to meet a wide range of needs.

Delivery

ORIENTAL MOTOR'S unique 'Just-in-Time' production system allows the manufacture of any size order in a very short time and with little advanced notice. Additionally, ORIENTAL MOTOR uses 'one-by-one' manufacturing processes where one piece can be manufactured as simply as one thousand pieces. Over 1200 of ORIENTAL MOTOR'S most popular and innovative products are available for same day shipping. Another 10,000 products are available for shipping within 7 days. Because of the strategic location of ORIENTAL MOTOR'S US distribution centers, the transportation time from the distribution center to the customer is 3 days or less by ground service to anywhere in the continental US.

How to Find a Product

Follow the steps below to find, from our extensive range of products, one that best suits your specific purpose.

When You Know the Product Name or Model Number

You can find the applicable pages under "Contents" or "Product Index."

Contents

- Found at the beginning of this catalog.
- Products are listed by model.

Product Index

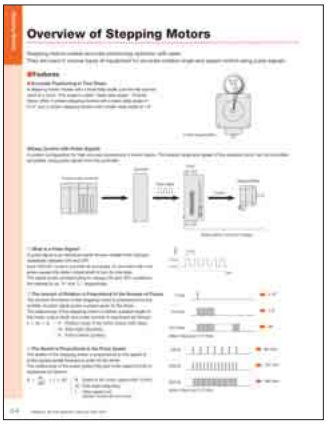
- Found at the end of this catalog.
- Products are listed in numerical/alphabetical order.

When You Know What Product Type You Want to Use

Open the front page of each product section, and based on the information on the "Introduction" pages, find a product that meets your needs.

Front Page

- Found on the first page of each motor's section.



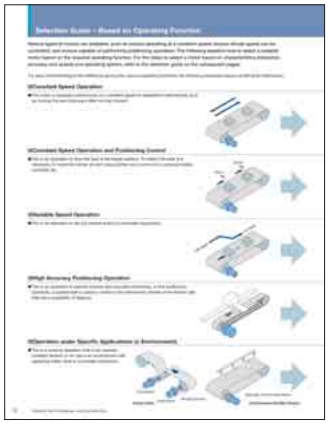
Introduction

- Found on the second page of each motor's section.

When You are not Sure Which Product to Use

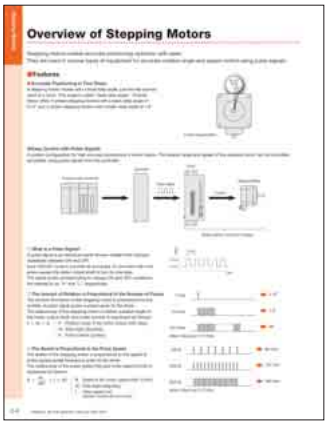
Find a required product by referring to the "selection guide" pages at the beginning of this catalog or "introduction" pages of each product section.

Selection Guide



Introduction

- Found on the second page of each motor's section.



How to Read Product Pages

●Information on RoHS Directive

Products conforming to the RoHS Directive are indicated by this mark.

●Details of RoHS Directive ➜ Page G-38

●Side Bar

Motors are color-coded as follows:

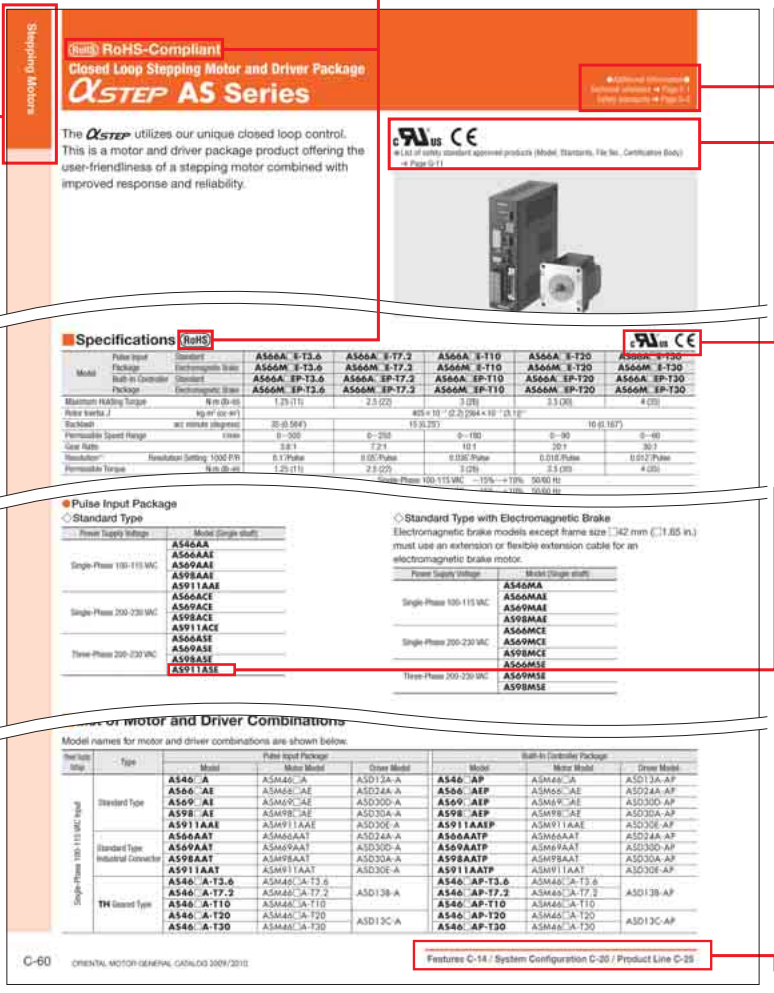
- Standard AC Motors
- Speed Control Systems
- Stepping Motors
- Linear and Rotary Actuators
- Cooling Fans

●About CAD Data (DXF Format)

CAD data (DXF format) is available for the items denoted by DXF (or DXF).

CAD data can be downloaded from Oriental Motor's website (www.orientalmotor.com).

(Sample)



●Additional Information

●Information on Safety Standards

Products conforming to safety standards are indicated by symbols of the approval. Check the details of each safety standard on page G-2.

For more information on model, standards, file number and certification body, check the list of safety standard approved products on page G-11.

●Model Name

The model name uses both numbers and letters. In this catalog, model names are written in bold.

Example: **4IK25GN-AW2U**

For package products, the model names are given in bold and the component parts (motor model and driver model) are written in standard characters.

Example:

Package model: **AS66AAE**

Motor Model: ASM66AAE

Driver Model: ASD12A-A

●Footer

Indicates page references.

■Symbols

RoHS — The products conforming to the RoHS Directive

cULus, c UL us LISTED — Recognized by Canadian safety requirements and UL under the recognition program of Underwriters Laboratories Inc.

UL recognized component

CSA certified component

CSA certified component
Indicates that UL has certified that the product meets CSA Standards.

VDE — EN or IEC certified component
Indicates that VDE has certified that the product meets EN or IEC Standards.

EN or IEC certified component
Indicates that TÜV Rheinland has certified that the product meets EN or IEC Standards.

D — EN or IEC certified component
Indicates that DEMKO has certified that the product meets EN or IEC Standards.

CCC certified component (GB certified component)

CE — Products of self-declaration of conformity on EN/IEC Standards.

PS E — Products of self-declaration of conformity on Electrical Appliance and Material Safety Law (Japan).

JET — Certified by Japan Electrical Safety & Environment Technology Laboratories (JET) based on Electrical Appliance and Material Safety Law (Japan).

JET — JET components and materials certified products

Product Lineup

Oriental Motor has an extensive lineup of products, including standard AC motors, brushless motors and stepping motors. The following "Selection Guide" pages provide the basic selection steps you can use to find a product that best suits your specific application and purpose.

Motor Types	Motor/Control Circuit	
	**Standard AC Motors**	
	Constant Speed Motors	**Induction Motors/Reversible Motors**
		World **K** Series Induction Motors / Reversible Motors — Page A-19 / Page A-77
		V Series — Page A-158
		Synchronous Motors
		Synchronous Motors — Page A-193
		Low-Speed Synchronous Motors — Page A-203
		Electromagnetic Brake Motors
		World **K** Series — Page A-109
		V Series — Page A-172
		Clutch and Brake Motors — Page A-183
	Brake Pack — Page A-277	
	Watertight, Dust-Resistant Motors	**FPW Series** — Page A-215
	Torque Motors — Page A-225	
	**Speed Control Systems**	
	Brushless Motors	
	Speed Control Motors	**Speed Controller FE100/FE200** — Page B-156
		Speed Controller ES01/ES02 — Page B-172
	**Stepping Motors**	
		Stepping Motors
		2-Phase Stepping Motors **PK** Series/**PV** Series — Page C-205

Package Products (Motor and Control Circuit)

Linear and Rotary Actuators

Refer to page D-2

Cooling Fans

Refer to page E-2

AC Input

- **BX** Series — Page B-16
- **BLF** Series — Page B-60
- **BLU** Series — Page B-86
- **FBLII** Series — Page B-104

DC Input

- **BLH** Series — Page B-118

AC Motor Systems — Page B-137

- **BHF** Series — Page B-138
- **US** Series — Page B-202

Closed Loop Stepping Motor and Driver Packages α_{STEP}

- AC Input **AS** Series — Page C-14
- DC Input **ASC** Series — Page C-62

Stepping Motor and Driver Packages AC Input

- 5-Phase **RK** Series — Page C-90
- 2-Phase **UMK** Series — Page C-122

Stepping Motor and Driver Packages DC Input

- 5-Phase **CRK** Series — Page C-134
- 2-Phase **RBK** Series — Page C-164
- 2-Phase **CMK** Series — Page C-180

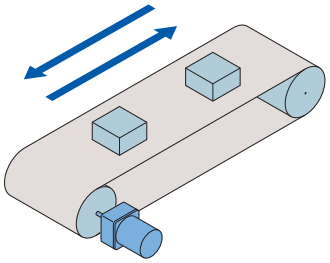
Selection Guide – Based on Operating Function

Various types of motors are available, such as motors operating at a constant speed, motors whose speed can be controlled, and motors capable of performing positioning operation. The following explains how to select a suitable motor based on the required operating function. For the steps to select a motor based on characteristics (resolution, accuracy and speed) and operating system, refer to the selection guide on the subsequent pages.

For easy understanding of the difference among the various operating functions, the following examples assume a belt-drive mechanism.

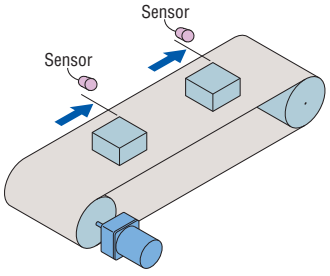
Constant Speed Operation

●The motor is operated continuously at a constant speed or operated bi-directionally such as moving the load backward after moving forward.



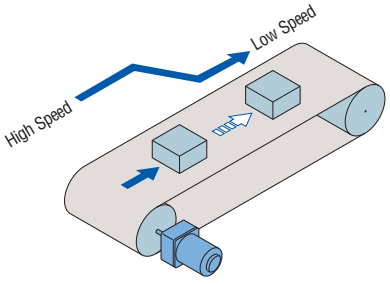
Constant Speed Operation and Positioning Control

●This is an operation to stop the load at the target position. To detect the load, it is necessary to install the sensor at each stop position and control it by a programmable controller etc.



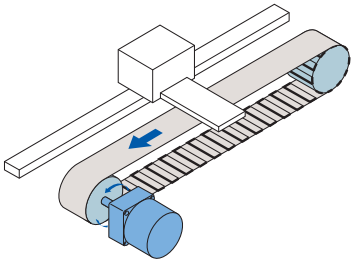
Variable Speed Operation

●This is an operation to set the desired speed of automatic equipment.



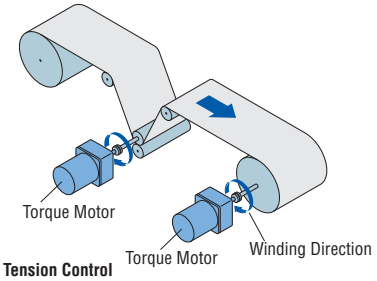
High Accuracy Positioning Operation

●This is an operation to perform precise and accurate positioning. In this positioning operation, a toothed belt is used to construct the mechanism instead of the friction belt that has a possibility of slipping.

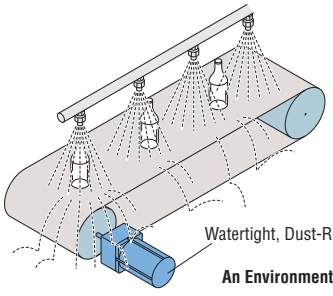


Operation under Specific Applications or Environments

●This is a winding operation that must maintain constant tension or for use in an environment with splashing water, dust or a powdery substance.



Tension Control



An Environment with Water Showers

■For Continuous Operation
Induction Motors

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■For Bi-Directional Operation
Reversible Motors

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■For Synchronous Operation
Synchronous Motors

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■For Synchronous Operation
Low-Speed Synchronous Motors

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■For Load Holding
Electromagnetic Brake Motors

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■Frequent Starting and Stopping
Clutch and Brake Motors

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■Control Circuit for Instantaneous Stop
Brake Pack **SB50W**

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■Speed Control Systems　Brushless Motor Systems

AC Input

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DC Input

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■Speed Control Systems
AC Motor Systems

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■Stepping Motors
Closed Loop Stepping Motor and Driver Package
αSTEP

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■Stepping Motor and Driver Package

AC Input

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DC Input

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■Tension Control and Other Operations
Torque Motors

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■Watertight, Dust-Resistant Motors

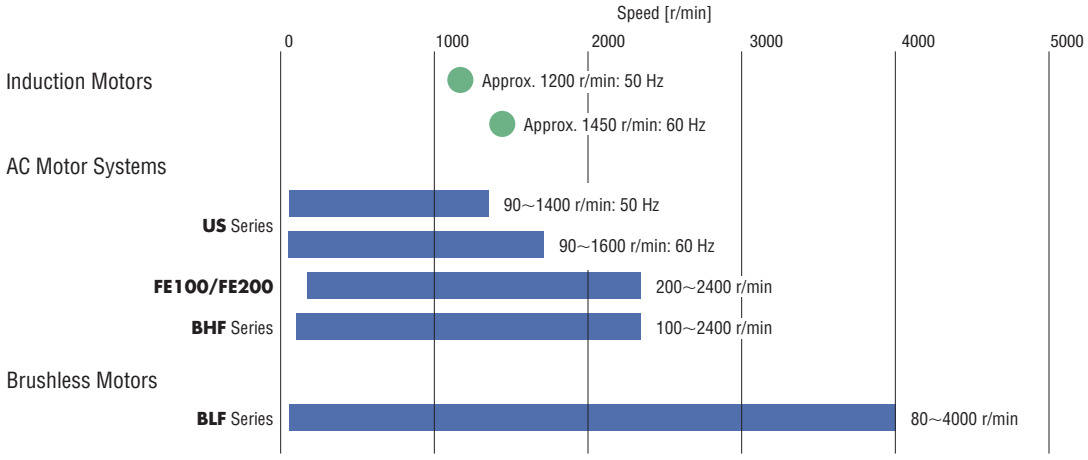
Page A-215

Selection Guide – Based on Characteristics

To meet the specification required for your application, the motor must meet the required characteristics such as speed, speed control range, braking characteristics and resolution as well as meet the operating functions. The following explains how to select a motor based on the required characteristics, by using representative motors as examples.

Speed and Speed Control Range (Motor alone)

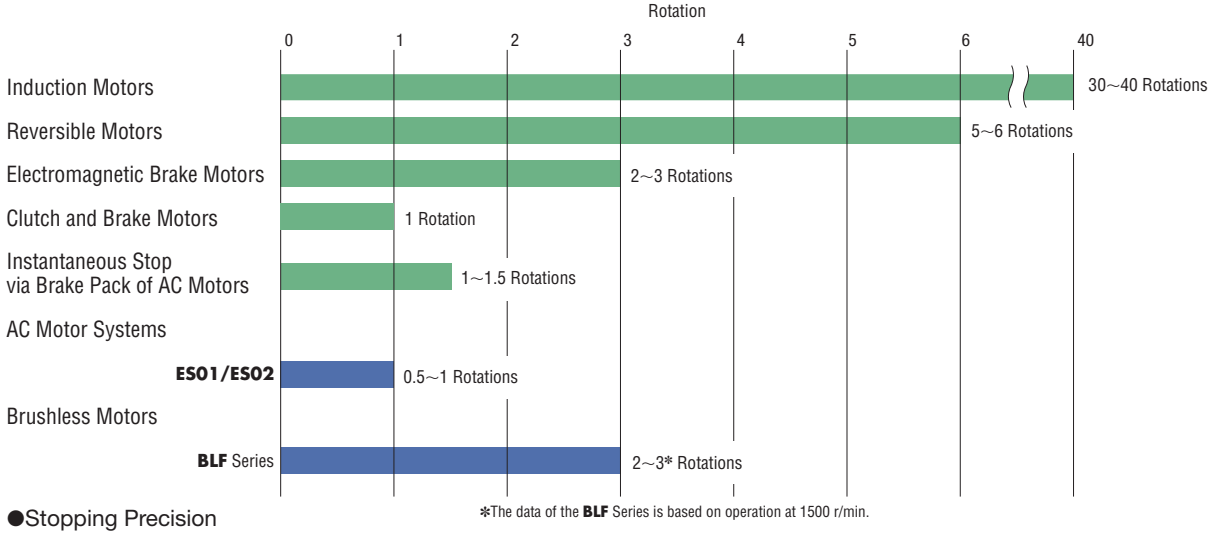
In an application where the motor operates at a constant speed, an induction motor is sufficient to carry out the required operating function. Take note that standard AC motors vary their speed according to the power supply frequency, and the rated speed is approximately 1200 r/min at a frequency of 50 Hz and approximately 1450 r/min at 60 Hz. If the required speed exceeds 1200 r/min, an inverter or brushless motor is applicable.



Braking Characteristics (Motor alone)

In a positioning application, you can use the instantaneous stop function of an electromagnetic brake motor, brake pack, speed control motor or brushless motor, as far as the operating function is considered. However, all of these motors use sensors to stop the load, and are therefore subject to overrun. If the equipment must perform high accuracy positioning, a stepping motor offering excellent stopping accuracy is applicable. The stopping accuracy of stepping motors is ±3 arc minutes (±0.05°) (**RK** Series, No-load state).

●Number of Rotations until Motor Stops (Reference values)



*The data of the **BLF** Series is based on operation at 1500 r/min.

●Stopping Precision

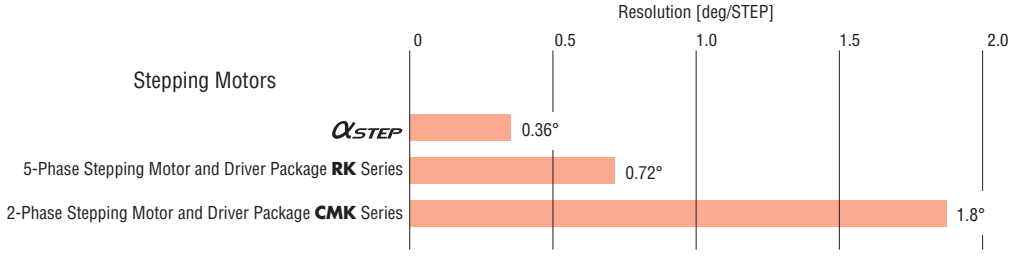
Stepping Motors α_{STEP}: ±5 arc minutes (±0.083°)

Note:

●The above values are measured at the motor shaft under no load. Use this data only as a reference because the actual values will vary depending on the specific load condition.

Resolution (Motor alone)

In an application requiring high accuracy positioning, a stepping motor is applicable. For stepping motors, we have 5-phase stepping motor and driver packages and 2-phase stepping motor and driver packages. 5-phase stepping motor and driver packages offer higher resolution and are capable of more precise positioning operation.



Selection Guide – Confirmation of Operating System

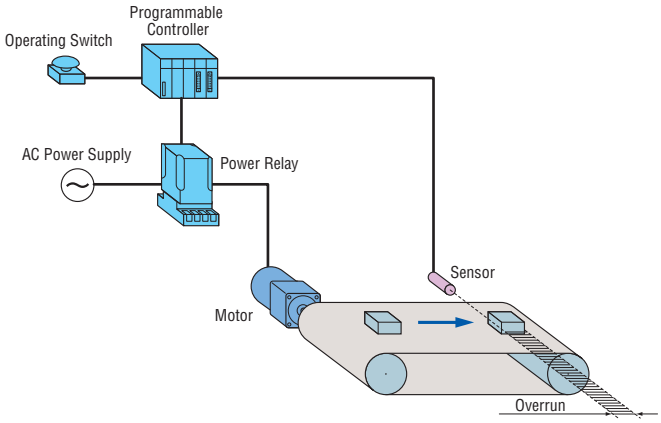
We have products adopting various operating systems, such as induction motors that directly supply AC power to the motor, and stepping motors that receive commands from a controller. Since the operating system varies according to the operating function, the following explanations assume a belt-drive mechanism for easy understanding of the difference among the various motor operations and operating systems. Note that sensors, power supply for signal control, breakers and other peripheral equipment is not explained.

System Configuration for Constant Speed Operation

In the standalone operating mode, power is supplied to the motor via an electromagnetic switch etc., where this switching (ON/OFF) is operated manually. In the automatic operation mode, power is supplied to the motor via a power relay, where the switching (ON/OFF) is controlled via a programmable controller.
To stop an electromagnetic brake motor at a target position, the controlled object such as a load or mechanism is detected using a sensor, and the sensor output is fed back to the programmable controller to implement position control.
However, the sensor position must be adjusted to prevent any overrun beyond the sensor position.

Applicable Products

- Induction Motors
- Reversible Motors
- Synchronous Motors
- Low-Speed Synchronous Motors
- Electromagnetic Brake Motors



Power Relay Used for Starting and Stopping the Motor

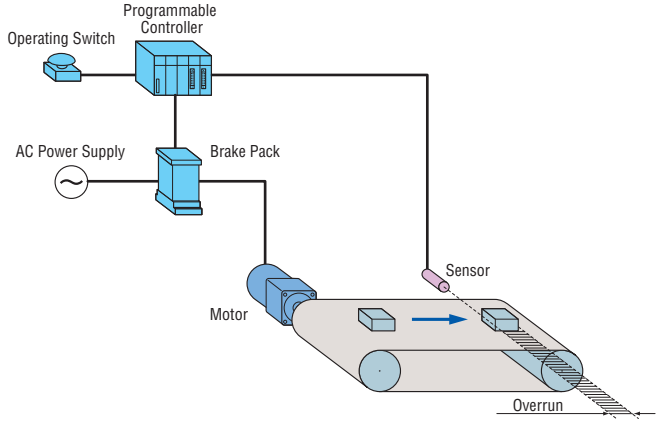
In an automatic operation using a programmable controller, periodic maintenance is required because of the life of power relay contacts. If you prefer a maintenance-free design, use an electronic-input type brake pack.

System Configuration for Constant Speed Operation and Positioning Operation

Starting and stopping of the motor is controlled using a brake pack. To stop the motor at a target position, the controlled object such as a load or mechanism is detected using a sensor, and the sensor output is fed back to a programmable controller to implement position control. However, the sensor position must be adjusted to prevent an overrun beyond the sensor position.
Since a sensor is needed at each stopping position, the sensor layout and wiring becomes complex when there are multiple-point stop operations. This system is suitable only for applications where there are several stopping points.

Applicable Products

- Brake Pack (Control circuit for an induction motor, reversible motor and electromagnetic brake motor)



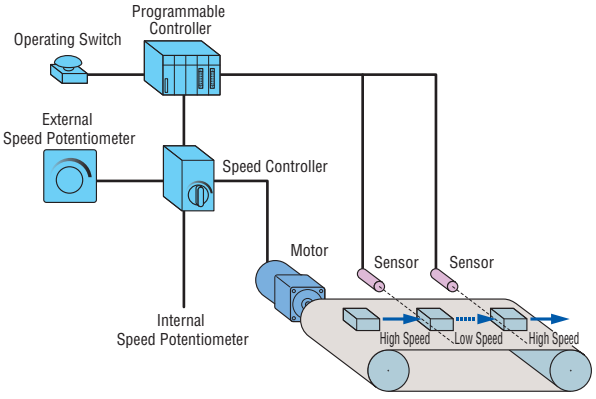
When There are Many Positioning Points

Since a sensor is needed at each stopping position, the sensor layout and wiring becomes complex when there are multiple stopping points. Stepping motors are suitable for applications where there are many positioning points.

System Configuration for Variable Speed Operation

The motor is started and stopped or operated at variable speed by means of a drive circuit, such as a speed controller. The operating speed is set using the internal speed potentiometer in the drive circuit or using an external speed potentiometer.
The number of operation speed varies with each product, such as two-speed or eight-speed. When the operating speed is to be changed automatically, the target load or mechanism is detected using a sensor, and the sensor output is fed back to a programmable controller to implement speed control.

Applicable Products
- AC Motor Systems
- Brushless Motors



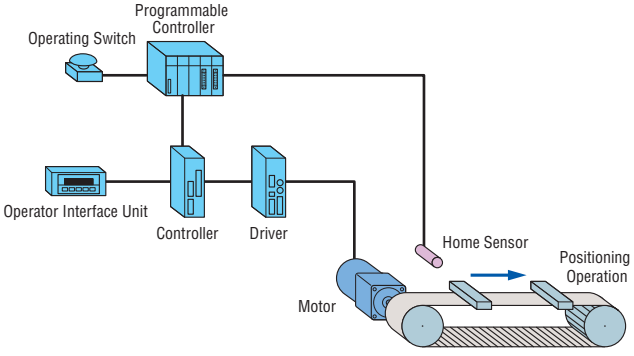
Number of Available Speeds

The number of speed settings varies with each product from one-speed to eight-speed. Choose a product according to your specific application.

System Configuration for High Accuracy Positioning Operation

Position and speed data are set in a controller, and a programmable controller selects and executes the data to implement automatic operation. Since stopping positions need not be detected, there is no need to install or wire stopping sensors. However, a home sensor must be installed. This system is suitable for multiple-point stop operations or in cases where the setup process needs to be simplified. This system also makes adjustment easy, because position and speed data can be set finely.

Applicable Products
- Stepping Motors



Products with Built-in Controller

Some products come with a driver equipped with a built-in positioning function or operating program function that is normally performed by a controller. These products help simplify the wiring process.
- Stepping Motors

  α_{STEP} **AS** Series Built-in Controller Package