Orientalmotor

NEW PRODUCTS

αSTEP AR Series Type

Motorized Linear Slides

EAS Series

Motorized Cylinders

EAC Series

Straight Type and Reversed Motor Type

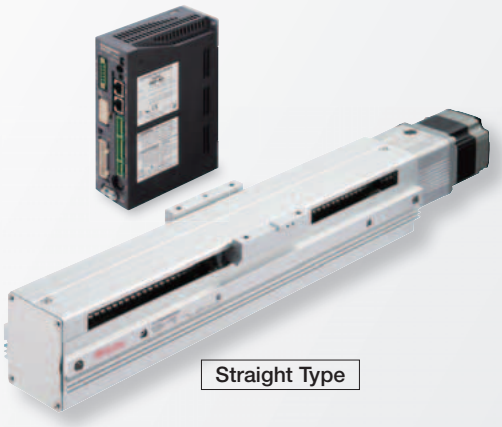
The New Standard in Motorized Linear Slides and Motorized Cylinders

Better Design and Performance

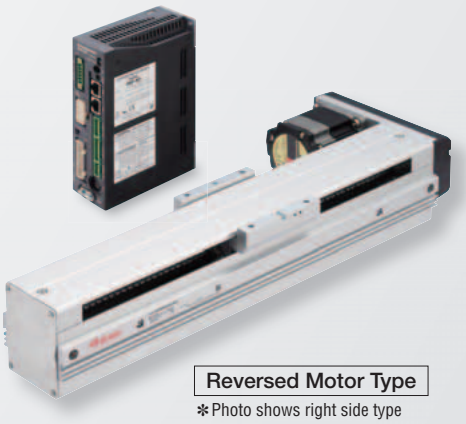
Motorized Linear Slides **EAS** Series

Straight Type
Reversed Motor Type
Same Price

- FLEX Built-in Controller (Store Data) Type / Pulse Input Type (or)
  - AC Power - Supply Input
  - DC Power - Supply Input



Straight Type



Reversed Motor Type

✻Photo shows right side type

Straight Type
- X-table
- Y-table

Reversed Motor Type (Right/Left option)
- X-table
- Y-table

Drive Method: Ball Screw

Maximum Stroke: Slide 500 mm/Cylinder 300 mn

Maximum Speed: Slide 800 mm/s/Cylinder 600 mn

Maximum Transportable Mass: Horizontal 60 kg/Vertical 30 kg

Repetitive Positioning Accuracy: ± 0.02 mm

Equipped with the **AR** Series motor and driver package with our unique closed loop control.

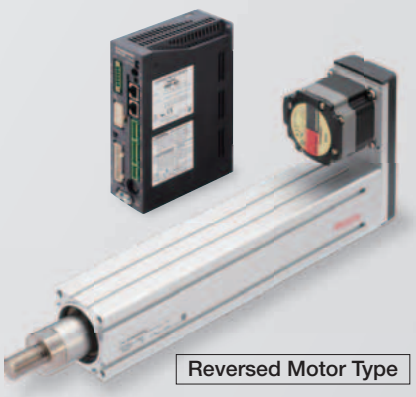
- Standard
- Electromagnetic Brake

Motorized Cylinders **EAC** Series

Straight Type
Reversed Motor Type
Same Price

- FLEX Built-in Controller (Store Data) Type / Pulse Input Type (or)
  - AC Power - Supply Input
  - DC Power - Supply Input

Straight Type



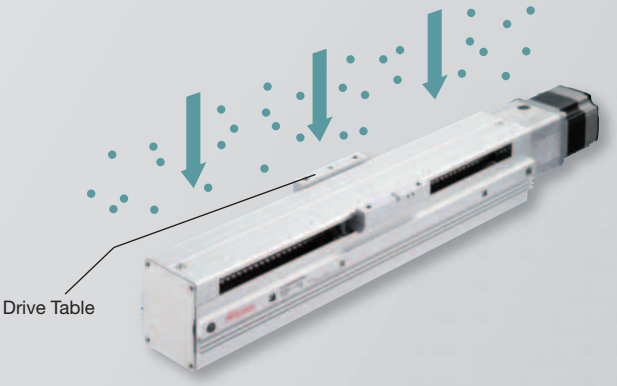
Reversed Motor Type

Straight Type
- Standard
- With shaft guide cover

Reversed Motor Type
- Standard
- With shaft guide cover

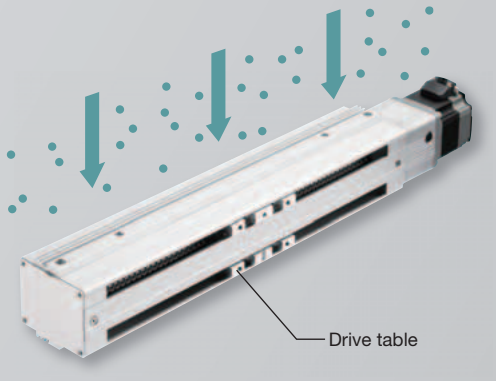
■ X-table

Infiltration of falling foreign particles can be reduced when installed horizontally.



■ Y-table

Infiltration of falling foreign particles can be reduced when wall-mounted.



AR Series High Function Drivers Increase System Configuration Flexibility

FLEX Built-in Controller (Stored Data) Type

With information necessary for the actuator operations, the burden of the host PLC (Master Controller) is reduced.

Pulse Input Type

For PLC (Master Controller) motion profile control, a pulse input driver is offered.

FLEX What is FLEX?

FLEX is a general term for products supporting I/O control, Modbus (RTU) control and Factory Automation (FA) network control. These products enable simple connection and simple control, shortening the total lead time for system configuration.

■ Standard

Depending on the equipment, an external guide may be necessary.

■ With shaft guide cover

There is no need to design or procure parts for the external guide.
Moving parts on the cylinder main unit side are protected, improving equipment safety.
This is useful for grease splash prevention in the shaft guide section and the prevention of the infiltration of foreign particles in the linear bush section.

Capable of a Variety of Movements, Regardless of the Operating Conditions!

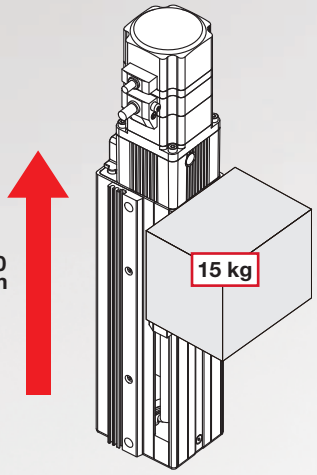
Offering the ability from low speed to high speed or with light loads or heavy loads, these motorized linear slides and cylinders are easier to use and offer high performance regardless of demanding operating conditions.

High-Speed

High-speed is possible with light loads or heavy loads, or even during inching operations.

Example Product:
Product Name: **EAS6**
Lead: 6 mm lead
Power Supply Input: 200~230 VAC

Example Operation:
Load Mass: 15 kg
Positioning Distance: 500 mm
Drive direction: Vertical



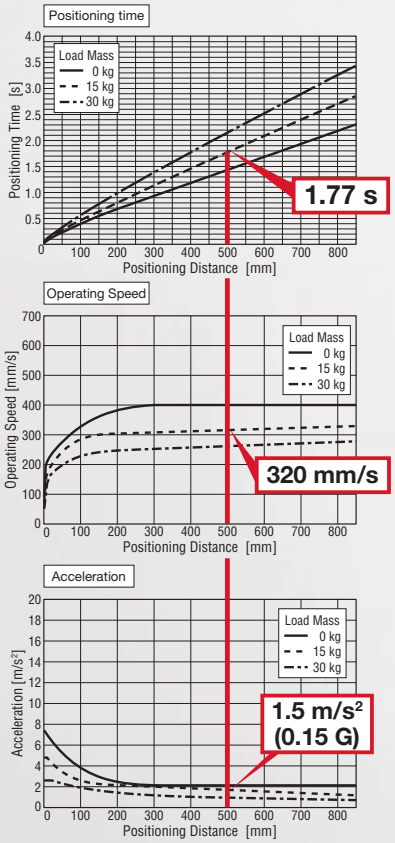
Only at Oriental Motor!

The positioning time, operating speed and acceleration can all be easily determined.
The product can be selected while estimating the movement from the same graph, even under changing operating conditions such as no load or inching.
Let our technical team help find the right actuator based on your profile demands.

High-Speed With a Heavy Load

High-speed is possible when transporting a heavy load in a vertical direction.

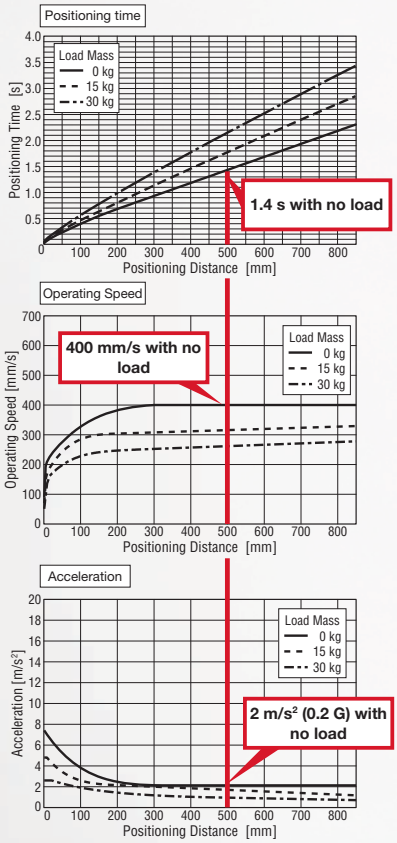
Load Mass: 15 kg
Positioning Distance: 500 mm
Positioning Time : 1.77 s
Operating Speed: 320 mm/s
Acceleration Speed: 1.5 m/s² (0.15 G)



High-Speed With a Light Load

Operation is possible at an even higher speed when the load is absent, for example on the return.

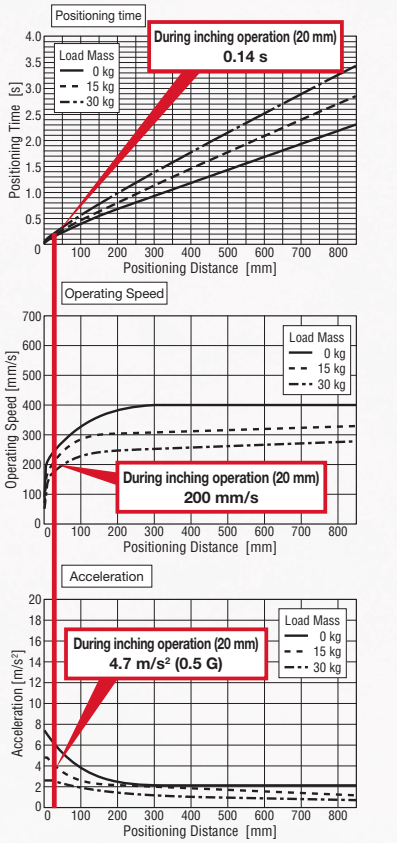
Load Mass: 0 kg
Positioning Distance: 500 mm
Positioning Time : 1.4 s
Operating Speed: 400 mm/s
Acceleration Speed: 2 m/s² (0.2 G)



High-Speed During Inching Operation

Operation is possible at high speed during inching operation over short distances.

Load Mass: 15 kg
Positioning Distance: 20mm
Positioning Time : 0.14 s
Operating Speed: 200 mm/s
Acceleration Speed: 4.7 m/s² (0.5 G)



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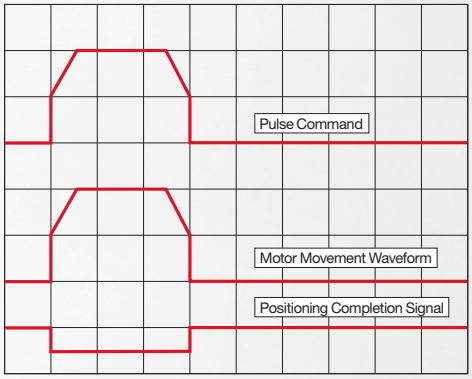
Quick and Responsive

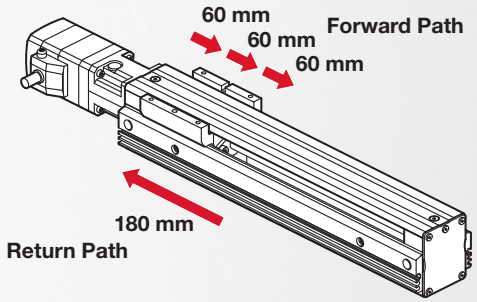
The high response of the closed loop motor and drive system provides superior short-distance positioning.

Since the α_{STEP} **AR** Series operates synchronously with pulse commands and generates high torque with a compact body, it offers excellent acceleration performance and response.

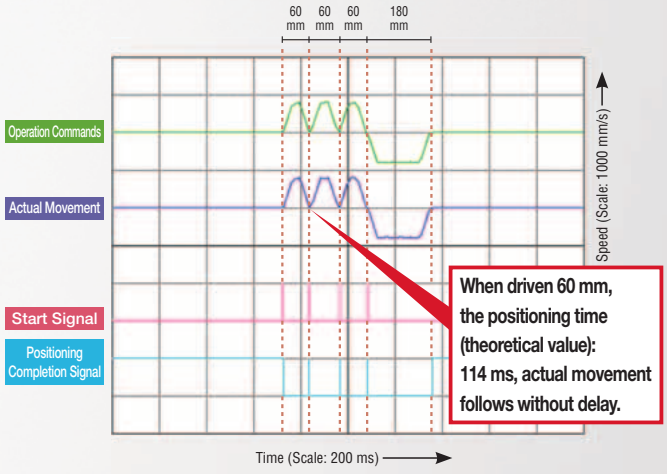


Example Product:
Product Name: **EAS4**
Lead: 12 mm lead
Power Supply Input:
200~230 VAC

Example Operation:
Horizontal Load Mass: No load
Inching Drive: 60 mm (forward path 3 times),
180 mm (return path once)
Operating Speed: 800 mm/s
Acceleration Speed: 20 m/s² (2 G)



Actual Movement of the Motorized Linear Slide in Relation to Operation Commands



This contributes to an increase in machine throughput.

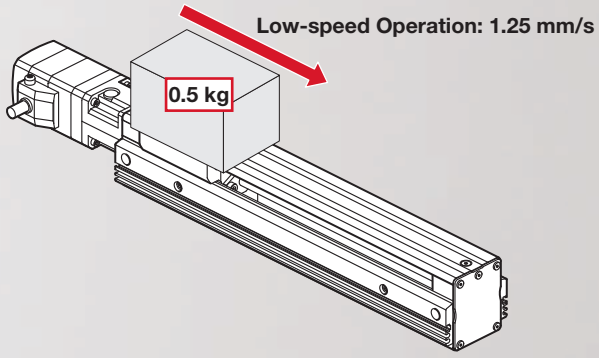
Stability at Low Speeds

Thanks to the closed loop motor drive system smooth drive function*, resolution can be improved without a mechanical element. As a result, speed fluctuation is minimal even at low speeds, leading to improved stability.

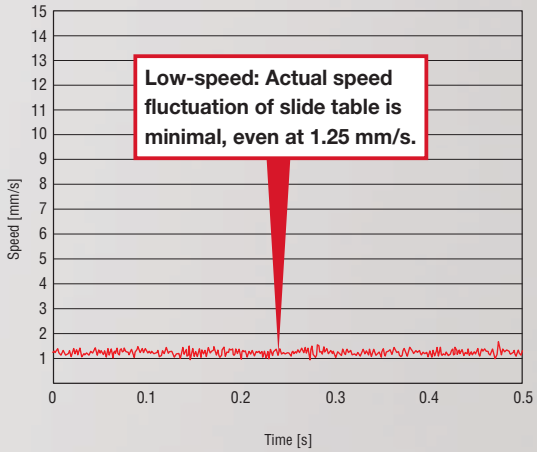
*About the smooth drive function:
The smooth drive function automatically microsteps based on the same traveling amount and traveling speed used in the full step mode, without changing the pulse input settings.

Example Product:
Product Name: **EAS4**
Lead: 12 mm lead
Power Supply Input:
200~230 VAC

Example Operation:
Horizontal Load Mass: 0.5 kg
Running Current: 100%
Resolution: 0.01 mm/step
Operating Speed: 1.25 mm/s



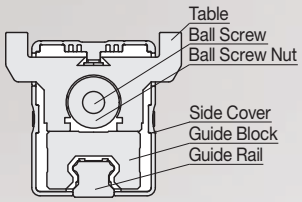
Actual Slide Table Speed in Relation to Operation Commands (1.25 mm/s)



Speed fluctuations are minimal even at low speed.

Compact and Powerful!

Compact, High Accuracy, High Rigidity Slides



This motorized linear slide incorporates a ball screw and a THK-manufactured LM Guide* as the guide. Since the high-accuracy LM Guide is directly installed in the enclosure base, these slides are suitable for applications which require traveling parallelism. (Traveling parallelism 0.03 mm) Being compact and stiff, this series is effective in supporting large transportable mass.

*"LM Guide" is a registered trademark of THK Co., Ltd.

For EAS6

■ EAS6 Type Transportable Mass

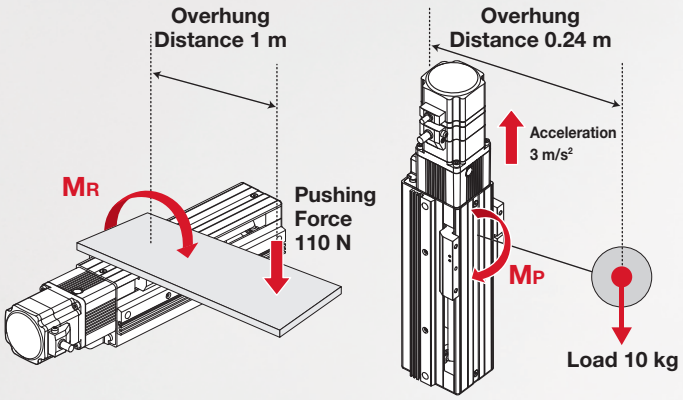
Max. Horizontal Transportable Mass: 60 kg
Max. Vertical Transportable Mass: 30 kg

■ Horizontal Installation

Even if the overhung length is 1 m, a pushing force of up to 110 N is possible.

■ Vertical Installation

If the overhung length is 0.24 m, a load of up to 10 kg may be transported.



Static Permissible Moment

The moment load permitted by the linear guide while stopped

Dynamic Permissible Moment

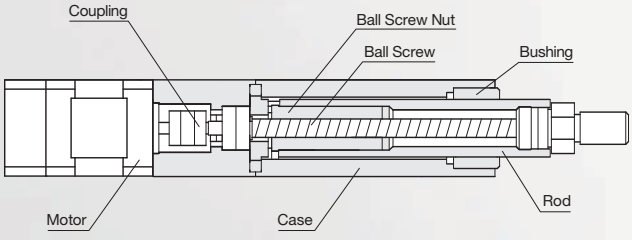
The moment load permitted by the linear guide during operation

The pushing force of the load are values calculated from the **EAS6** static permissible moment of 110.0 N·m and dynamic permissible moment of 31.8 N·m. (The weight of the board has not been taken into account.)

Dynamic Permissible Moment [N·m]	MR: 31.8 MY: 10.3 MP: 40.6
Static Permissible Moment [N·m]	MP: 86.0 MY: 34.0 MR: 110.0

Compact, High Thrust Force Cylinders

Using aluminum for the rod, these motorized cylinders produce high thrust force despite their compact and lightweight body. The unique structure suppresses vibration to achieve improved acceleration characteristics and high-speed positioning operation.



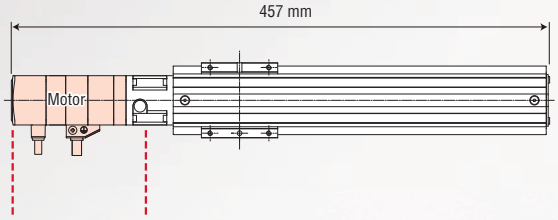
Direction of Motor Installation

Straight Type
Reversed Motor Type
Same Price

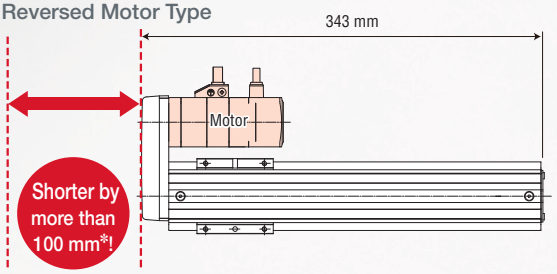
Reversed Motor types are provided for all motorized linear slides and cylinders. This contributes to a shorter overall length and space savings.

EAS4 with Electromagnetic Brake Type Stroke 200 mm

■ Straight Type



■ Reversed Motor Type

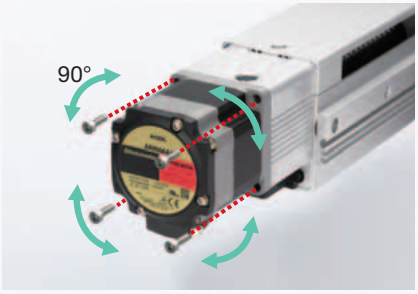


*When electromagnetic brake is installed

Cable Outlet Direction

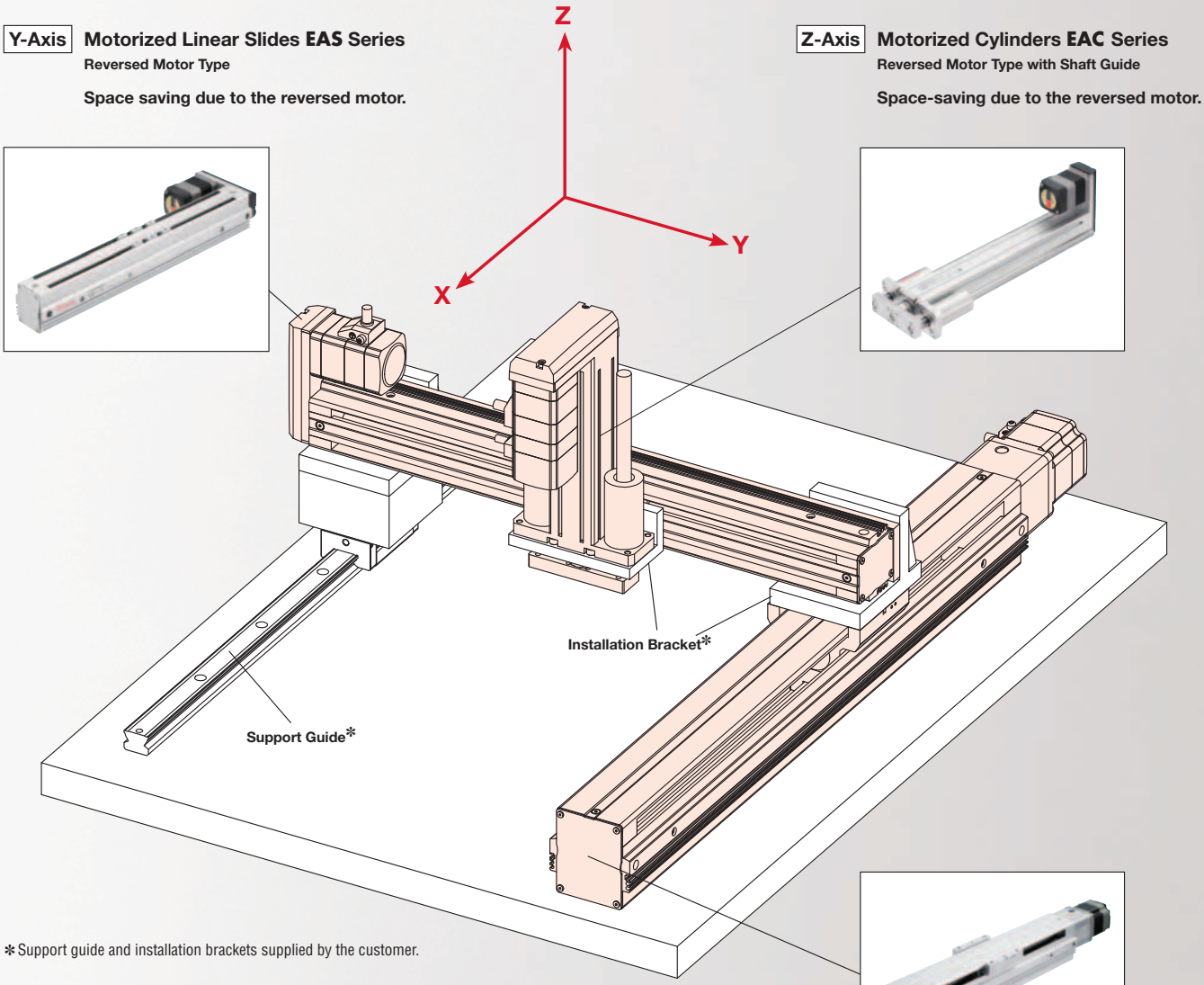
Rotatable in 4 directions (3 directions for Reversed Motor types)

Motor cable can be changed to any direction by simply rotating the motor. There is no need to leave space behind the motor since the cable outlet is on one side of the motor, allowing for easy connection and saving space.



Application Example

The image below shows a three axes system using the motorized linear slide **EAS** Series on the X-Y axis and the motorized cylinder **EAC** Series on the Z axis.



*Support guide and installation brackets supplied by the customer.

Please contact us at our Customer Service Center, where we will provide a "Sizing and Selection Service" to select the optimal product for your needs.

E-mail us at **techsupport@orientalmotor.com**

Easy Connection and Easy Handling!

EAS and **EAC** Series are equipped with the **αSTEP AR** Series motor and driver package which means a common drive platform for many actuator type applications.
For increased flexibility, utilize the Built-in Controller (Stored Data) type FLEX driver with the information necessary for the actuator operations built into the drive. The burden on the host PLC (Master Controller) is reduced.

αSTEP AR Series Type

■ A Variety of Products with a Unified Control Method

All products in the **AR** Series group have unified controllability.

Closed Loop Motor Package
AR Series

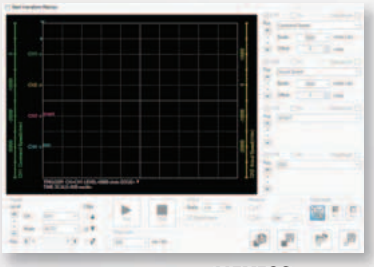
Hollow Rotary Actuators
DGII Series

Motorized Linear Slides
EAS Series

Motorized Cylinders
EAC Series

■ Data Setting Software and Control Module

The data setting software and the control module can both be used together with the **AR** Series.



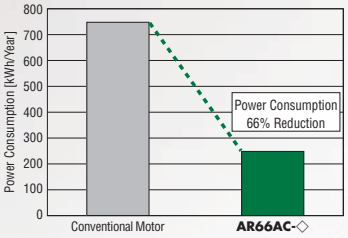
Data Setting Software **MEXE02**
The data setting software can be downloaded from the website.
A CD-ROM is also available.

Control Module **OPX-2A** (Sold separately)

Energy Saving

Power Consumption is 66% less compared to conventional Oriental Motor closed loop motors.

■ Power Consumption

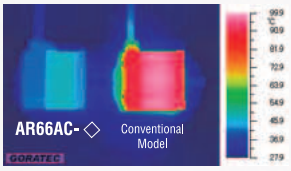


CO_2 Emissions
66% less
✻Operating Condition
Speed: 1000 r/min
Load Factor: 50%
Operating Time: 24-hour Operation (Operation 70%, standby 20%, off 5%), 365 days/year

Lower Heat Generation and Continuous Operation

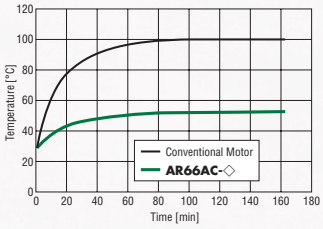
The use of high-efficiency technology enables significant reduction in heat generation and allows for continuous operation.

■ Temperature Distribution by Thermography



Comparison under the Same Conditions.

■ Motor Surface Temperature under Same Operating Conditions



Alarm Signal Output in Case of Abnormality

If an overload is applied continuously, an alarm signal is output. When the positioning is complete, an END signal is output.

No Tuning

The **αSTEP AR** Series requires no tuning to operate. Because of its construction, there is no hunting or dithering when stopped. When required, it utilizes the “Built-in Rotor Position Detection Sensor” to maintain commanded position.

Distance Between Motor and Driver Extendable Up to 30 m (98.4 ft.)

The included cable or the optional cables (sold separately) can be used to extend the distance to a maximum of 30 m (98.4 ft.). Flexible cables are also available as an option (sold separately).

Continued on next page

Data Setting Software

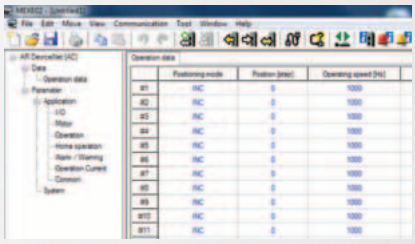
Easy to use data setting software enables data setting and verification of the actual drive by using a computer.

■ Data Setting Software **MEXE02**

The data setting software can be downloaded from the website.
A CD-ROM is also available.

● Operating Data and Parameter Settings

Operating data and parameter settings can be easily carried out on the computer. Since data settings can be stored, when exchanging a driver, simply transfer the stored data to create the same settings.



● Teaching and Remote Operation

Data setting software can be used to drive the motor. This can be used for teaching or test drive purposes.

● Multi-monitoring enables remote operation and teaching while monitoring.

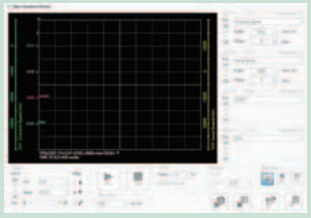
Various Monitoring Functions

●I/O Monitoring

The state of I/O wiring to the driver can be verified by computer. This can be used for post-wiring I/O checks or I/O checks during operation.

●Waveform Monitoring

The operational state of the motor (such as command speed and motor load factor), can be checked by an oscilloscope-like image. This can be used for equipment start-up and adjustment.



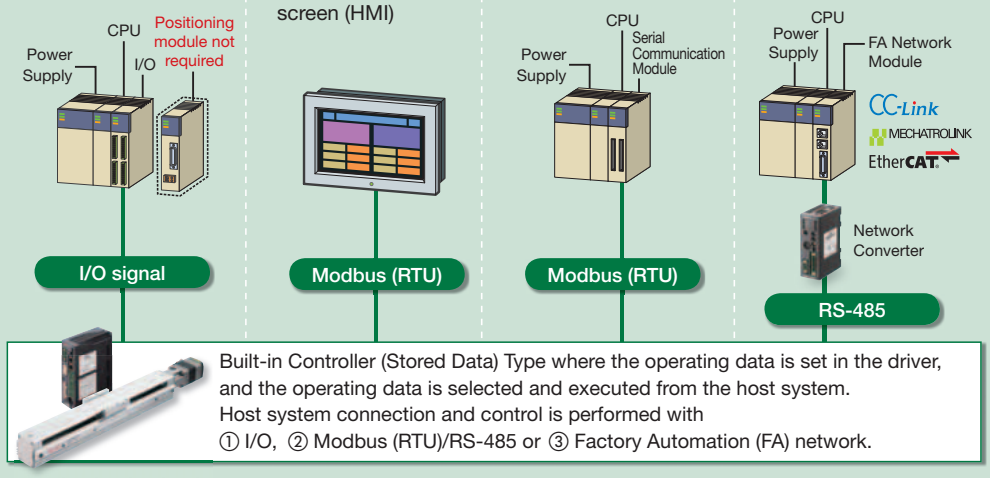
●Alarm Monitoring

When any abnormality arises, the content of the abnormality and the countermeasure can be verified.

2 Driver Types: Built-in Controller (Stored Data) or Pulse Input Type

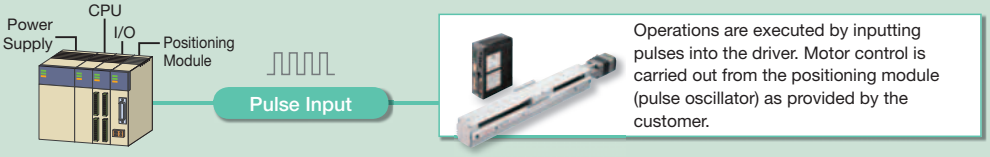
2 types of **EAS** and **EAC** Series drivers are available to match the requirements of the host PLC (Master Controller).

■ Built-in Controller (Stored Data) Type



Built-in Controller (Stored Data) Type where the operating data is set in the driver, and the operating data is selected and executed from the host system.
Host system connection and control is performed with
① I/O, ② Modbus (RTU)/RS-485 or ③ Factory Automation (FA) network.

■ Pulse Input Type



Operations are executed by inputting pulses into the driver. Motor control is carried out from the positioning module (pulse oscillator) as provided by the customer.

By using a network converter (sold separately), CC-link communication, MECHATROLINK or EtherCAT communication are possible. Operating data, parameter settings or operation commands can be input via the various communication types.

- The burden on the programmable master controller is reduced and costs are lowered when multiple axes are used.
- Unifies slaves for compatibility with various networks.
- Can also handle group sending function between slaves.

■ CC-Link compatibility: Max. 12 axes.
■ MECHATROLINK and EtherCAT compatibility: Max.16 axes.

Driver Characteristics

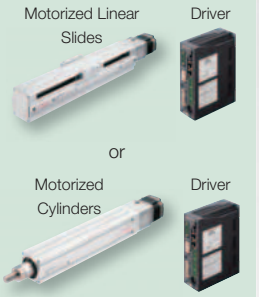
Built-in Controller (Stored Data) Type FLEX

The burden on the programmable PLC is reduced because the information necessary for operation of the motorized linear slides and cylinders is built into the driver. This simplifies the system configuration for multi-axis control.
Set via data setting software, control module (sold separately), or RS-485 communication.

Operation Type

With built-in controller packages, the operating speed and traveling amount of the motorized linear slides and cylinders are set with operating data and operations performed based on the selected operating data.

Basic Settings
(Factory settings)



Operating data setting and parameter changes

Data Setting Software (**MEXE02**)
or

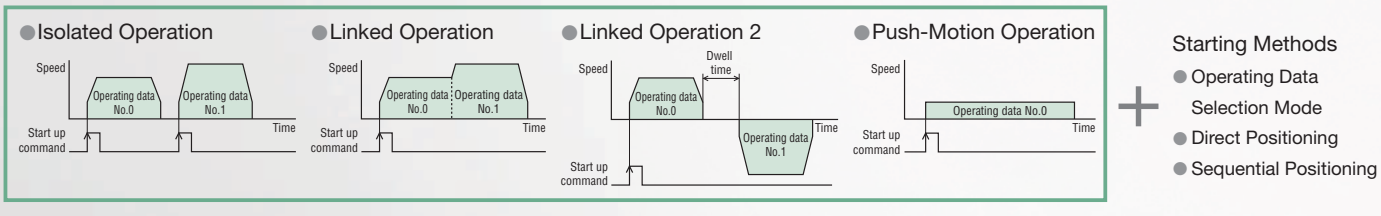
Control Module (**OPX-2A**)

- Data Setting
- Test Operation
- Alarm History
- Parameter Changes
- Monitor
- Data Copy

- Setting via RS-485 communication is also possible.
- The data setting software can be downloaded from the website. A CD-ROM is also available.

Item		Content	
Common	Control Method	I/O Control	
		RS-485 Communication	Network converter connection
			Modbus RTU protocol connection
	Position Command Input	Setting with operating data number. Command range for each point: −8388608～8388607 [step] (Setting Unit: 1 [step])	
	Speed Command Input	Setting with operating data number. Command Range: 0～1000000 [Hz] (Setting Unit: 1 [Hz])	
	Acceleration/Deceleration Command Input	Set with the operating data number or parameter. Select acceleration/deceleration rate [ms/kHz] or acceleration/deceleration time [sec]. Command Range: 0.001～1000.000 [ms/kHz] (Setting Unit: 0.001 [ms/kHz]) 0.001～1000.000 [sec] (Setting Unit: 0.001 [sec])	
	Acceleration/Deceleration Processing	Velocity filter, movement average filter	
Return-To-Home Operation	Return-to-Home Modes	2-Sensor Mode	A return-to-home operation that uses a limit sensor (+LS, −LS).
		3-Sensor Mode	A return-to-home operation that uses a limit sensor and HOME sensor.
		Pushing mode	This is the return-to-home operation for pushing to the mechanical end.
		Position Preset	A function where P-PRESET is input at the desired position to confirm the home position.
			Set the home position to the desired value.
Positioning Operation	Number of Positioning Points	64 points (No. 0～63)	
	Operating Modes	Incremental mode (Relative positioning)	
		Absolute mode (Absolute positioning)	
	Operation Functions	Independent Operation	A PTP (Point to Point) positioning operation.
		Linked Operation	A multistep speed-change positioning operation that is linked with operating data.
		Linked Operation 2	A positioning operation with a timer that is linked with operating data. The timer (dwell time) can be set from 0～50.000 [sec]. (Setting Unit: 0.001 [sec])
		Push-Motion Operation	Continuous pressurizing position operations are performed with respect to load. Maximum speed of operation is 25 (mm/s).
	Start Methods	Operating Data Selection Method	Starts the positioning operation when START is input after selecting M0～M5.
		Direct Method (Direct positioning)	Starts the positioning operation with the operating data number set in the parameters when MS0～MS5 is input. Starts the positioning operation.
		Sequential Method (Sequential positioning)	Starts the positioning operation in sequence from operating data No. 0 each time SSTART is input.
Continuous Operation	Number of Speed Points	64 points (No. 0～63)	
	Speed Change Method	Change the operating data number.	
Other Operations	JOG Operation	Execute regular feed by inputting +JOG or −JOG.	
	Automatic Return Operation	When the motor position is moved by an external force while the motor is in a non-excitation state, it automatically returns to the position where it originally stopped.	
Absolute Backup		Build an absolute system by using a battery (accessory).	

Positioning Operation

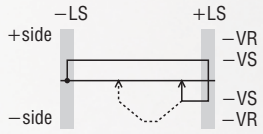


Starting Methods
- Operating Data Selection Mode
- Direct Positioning
- Sequential Positioning

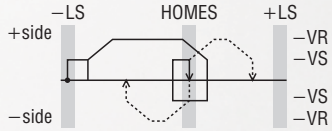
Continued on next page

Return-To-Home Operation

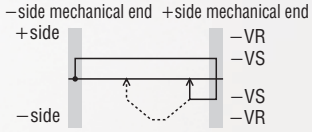
● 2-sensor mode



● 3-sensor mode

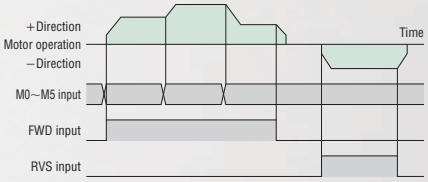


● Pushing mode



● Position preset

Continuous Operation



Other Operations

● JOG Operation (Test Operation)

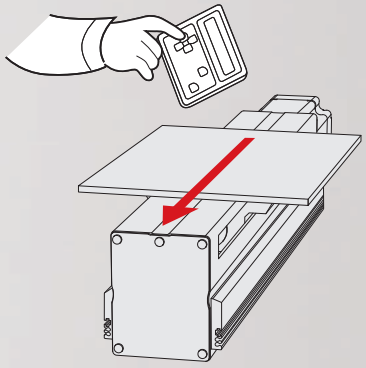
● Automatic Return Operation

● Equipped with a sequence for return-to-home operation that reduces the burden of the host (master controller) and the hassle of combining programs or sequences.

■ Teaching Function

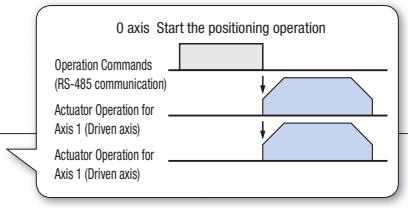
Teaching can be done using data setting software **MEXE02**✻ or the control module **OPX-2A** (sold separately). The table and rods are moved to the desired position, and the position data at that time is stored as the positioning data.

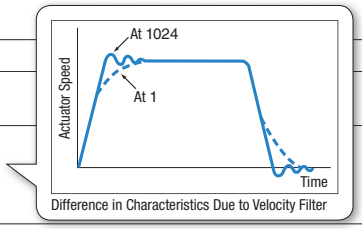
✻The data setting software can be downloaded from the website. A CD-ROM is also available. For details, please contact the nearest Oriental Motor sales office.



Main Function

Function	Content
Motor Resolution Setting Function✻1	The motor resolution can be changed by the driver without the mechanically operated speed reduction mechanism. A desired setting can be made from 100～10000 [P/R]. How to obtain the resolution on the actuator $1000 \times \frac{\text{Electronic gear B}}{\text{Electronic gear A}} \times 18$ (Gear ratio) [P/R]
Group Send Function (RS-485 communication or via a network converter)	Configure a group of multiple axes connected using RS-485 communication, and send commands by group. Perform simultaneous start and simultaneous operation for multiple axes.
Hardware Overtravel	This function stops the linear slide when the mechanical limit is exceeded.
Software Overtravel	This function stops the linear slide when exceeding the limit set by the software. Depending on the setting, an alarm can also be output without stopping.
STOP Input (External stop)	This function forcibly stops operation when there is an abnormality or other issue. Select instantaneous stop, deceleration stop, or all windings off (actuator holding force is off) as the stopping method.
Alarm Code Output	Output alarm codes that are occurring.
Alarm History	Even if the power is turned off, up to 10 alarms that have occurred can be stored. This can be used for troubleshooting.
Velocity Filter	This is used to make adjustments when a smooth start/stop or smooth motion at low speed operation is required. Even for sudden operation command changes, this function controls the speed changes of the linear slide to prevent them from becoming too large.
Teaching Function✻1	Move the load to the target position, and store the position data at this time as the positioning data.
I/O Monitoring✻1	Check the ON/OFF status of the I/O signals.
Waveform Monitoring✻2	Check the operating speed and I/O signals as a waveform.





● The **MEXE02** data setting software can be downloaded from the Oriental Motor website. Data setting software communication cable (**CC05IF-USB**) required (sold separately).
For details, please contact the nearest Oriental Motor sales office.

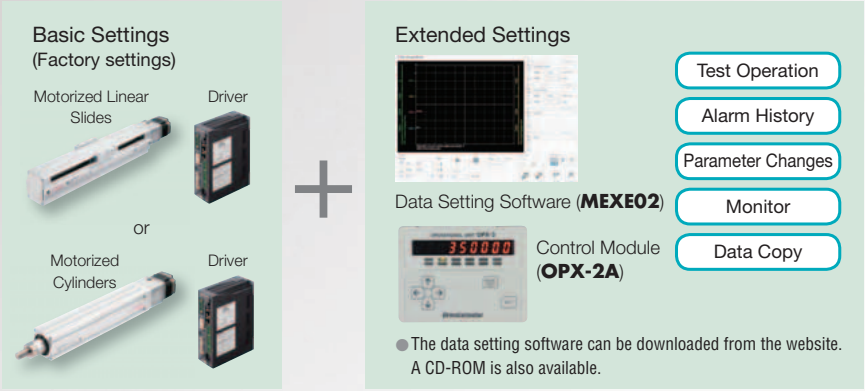
✻1 Can be performed with the control module sold separately (**OPX-2A**) or data setting software (**MEXE02**).

✻2 Can be performed with the data setting software (**MEXE02**).

Driver Characteristics

Pulse Input Type

The data setting software and the optional control module enables response to parameter changes, alarm history display and a variety of monitoring to be customized to the needs of the customer.



Main Additional Functions from Extended Settings

Item	Overview	Basic Setting	Extended Settings
Selection of Pulse Input Mode	Select the 1-pulse input or 2-pulse input (negative logic) mode.	●	●
	In addition to the normal settings, phase difference input can be set. · 1-pulse input mode (positive logic/negative logic) · 2-pulse input mode (positive logic/negative logic) · Phase difference input (1-multiplication/2-multiplication/4-multiplication)	–	●
Resolution Setting	Select the resolution with the function switches (D0, D1, CS0, CS1).	●	●
	Changes the value of the electronic gear corresponding to each function switch (D0, D1, CS0, CS1).	–	●
Running Current Setting	Changes the running current setting with the current setting switch (CURRENT).	●	●
	Change the value corresponding to each of 0～F (16 levels) for the current setting switch (CURRENT).	–	●
Standstill Current Ratio Setting	Sets the ratio of the standstill current relative to the running current.	–	●
Motor Rotational Coordinates Setting	Sets the rotational coordinates for the motor.	–	●
All Windings On Signal (C-ON input)	The input signal for the excitation of the motor.	●	●
	Sets the C-ON input logic for when the power supply is input.	–	●
Return to Excitation Position Operation during All Windings On Enable/Disable	Sets whether or not to return to the excitation position (deviation 0 position) during all windings on.	–	●
Alarm Code Signal Enable/Disable	Set to output the code when an alarm occurs.	–	●
END Output Signal Range Setting	Changes the END output signal range.	–	●
END Output Signal Offset	Offsets the END output signal value.	–	●
A-/B-Phase Output	Use for motor position verification.	●	●
Timing Output Signal	This is output each time the motor rotates 7.2° (0.4° for the output table).	●	●
Velocity Filter Setting	Applies a filter to the operation command to control the motor action.	●	●
	Change the value corresponding to each of 0～F (16 levels) for the setting switch.	–	●
Vibration Suppression Function for Normal Mode	Set to suppress resonant vibration during rotation.	–	●
	Set to suppress vibration during acceleration, deceleration and stopping.	–	●
Gain Adjustment for Current Control Mode*	Adjusts the position and speed loop gain.	–	●
	Adjusts the speed integration time constant.	–	●
	Sets the damping control vibration frequency.	–	●
	Sets whether to enable or disable damping control.	–	●
Selection of Motor Excitation Position at Power On	Selects the motor excitation position for when the power is turned on.	–	●
Control Module Setting	Select whether to use symbols or an absolute value display for the speed display of the control module.	–	●
	Sets the geared motor gear ratio for the speed monitor.	–	●

● The **MEXE02** data setting software can be downloaded from the Oriental Motor website. Data setting software communication cable (**CC05IF-USB**) required (sold separately).
For details, please contact the nearest Oriental Motor sales office.

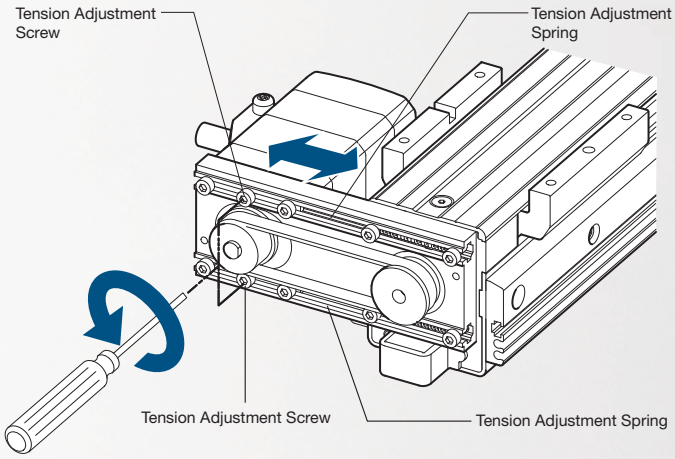
*Except when to further reduce heat generation or noise, using normal mode is recommended.

Simple Maintenance and Service!

Maintainability has been improved by using Oriental Motor's unique belt tension adjustment mechanism and through the standardization of maintenance parts based on the **AR** Series.

Easy Belt Replacement (Reversed Motor Type)

Thanks to Oriental Motor's unique belt tension adjustment mechanism, belt replacement is easy.



If the screw is loosened, the belt tension is adjusted to an appropriate value by the force of the spring.
The above diagram shows a mechanism on the **EAS** Series reversed motor section. The mechanism for the **EAC** Series is the same.

Standardization of Maintenance Parts

The motor and driver of the **EAS** Series and **EAC** Series use the **AR** Series standard parts. Standardization of parts is simplified because parts are managed collectively for all units.

Less Parts to Order with Short Delivery Time!

Simplifies stock management and the often complex order process by:

Reducing the Number of Parts

Because the sliders/cylinders, motors, drivers and cables are delivered as a set under one product name, the amount of parts ordered can be reduced.

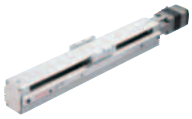
Short Delivery

Oriental Motor can deliver products within a short period of time.

For example...	Up to 5 units can be shipped out in 8 days*!

*Working days at Oriental Motor

Product Line

Series Name Type	Product Width×Height Mass	Power Supply Input [V]	Lead [mm]	Stroke [mm] 100 200 300 400 500	Max. Speed [mm/s] 100 200 300 400 500 600 700 800
EAS Series Straight Type 	**EAS4** 58.4×60 mm 1.8～4.0 kg	Single-Phase 100-120*1 Single-Phase 200-240*2 Three-Phase 200-230*3	12	50～500	800
			6	50～500	400
		24/48 VDC	12	50～500	600
			6	50～500	300
	EAS6 75.4×83 mm 4.0～8.7 kg	Single-Phase 100-120*1 Single-Phase 200-240*2 Three-Phase 200-230*3	12	50～500	800
			6	50～500	400
		24/48 VDC	12	50～500	600
			6	50～500	300
EAS Series Reversed Motor Type 	**EAS4R** **EAS4L** 58.4×60 mm 1.8～4.0 kg	Single-Phase 100-120*1 Single-Phase 200-240*2 Three-Phase 200-230*3	12	50～500	800
			6	50～500	400
		24/48 VDC	12	50～500	600
			6	50～500	300
	EAS6R **EAS6L** 75.4×83 mm 4.0～8.7 kg	Single-Phase 100-120*1 Single-Phase 200-240*2 Three-Phase 200-230*3	12	50～500	800
			6	50～500	400
		24/48 VDC	12	50～500	600
			6	50～500	300

*1 Pulse Input Type is Single Phase 100-115 V *2 Pulse Input Type is Single Phase 200-230 V *3 Pulse Input Type only

Series Name Type	Product Width×Height Mass	Power Supply Input [V]	Lead [mm]	Stroke [mm] 100 200 300 400 500	Max. Speed [mm/s] 100 200 300 400 500 600 700 800
EAC Series Straight Type 	**EAC4** 42×42 mm 1.1～2.1 kg	Single-Phase 100-120*1 Single-Phase 200-240*2 Three-Phase 200-230*3	12	50～300	600
			6	50～300	300
		24/48 VDC	12	50～300	600
			6	50～300	300
	EAC6 60×60mm 2.6～4.8 kg	Single-Phase 100-120*1 Single-Phase 200-240*2 Three-Phase 200-230*3	12	50～300	600
			6	50～300	300
		24/48 VDC	12	50～300	600
			6	50～300	300
EAC Series Straight Type With shaft guide and cover 	**EAC4W** 42×114 mm 1.8～3.5 kg	Single-Phase 100-120*1 Single-Phase 200-240*2 Three-Phase 200-230*3	12	50～300	600
			6	50～300	300
		24/48 VDC	12	50～300	600
			6	50～300	300
	EAC6W 60×156 mm 4.1～7.5 kg	Single-Phase 100-120*1 Single-Phase 200-240*2 Three-Phase 200-230*3	12	50～300	600
			6	50～300	300
		24/48 VDC	12	50～300	600
			6	50～300	300
EAC Series Reversed Motor Type 	**EAC4R** 42×42 mm 1.1～2.1 kg	Single-Phase 100-120*1 Single-Phase 200-240*2 Three-Phase 200-230*3	12	50～300	600
			6	50～300	300
		24/48 VDC	12	50～300	600
			6	50～300	300
	EAC6R 60×60 mm 2.6～4.8 kg	Single-Phase 100-120*1 Single-Phase 200-240*2 Three-Phase 200-230*3	12	50～300	600
			6	50～300	300
		24/48 VDC	12	50～300	600
			6	50～300	300
EAC Series Reversed Motor Type With shaft guide and cover 	**EAC4RW** 42×114 mm 1.8～3.5 kg	Single-Phase 100-120*1 Single-Phase 200-240*2 Three-Phase 200-230*3	12	50～300	600
			6	50～300	300
		24/48 VDC	12	50～300	600
			6	50～300	300
	EAC6RW 60×156 mm 4.1～7.5 kg	Single-Phase 100-120*1 Single-Phase 200-240*2 Three-Phase 200-230*3	12	50～300	600
			6	50～300	300
		24/48 VDC	12	50～300	600
			6	50～300	300

*1 Pulse Input Type is Single Phase 100-115 V *2 Pulse Input Type is Single Phase 200-230 V *3 Pulse Input Type only

Upper Level: Dynamic Permissible Moment [N·m] Lower Level: Static Permissible Moment [N·m]			Maximum Transportable Mass in Horizontal Direction [kg]	Maximum Transportable Mass in Vertical Direction [kg]	Repetitive Positioning Accuracy [mm]	List Price
M_P	M_Y	M_R	10 20 30 40 50 60 70 80 90	10 20 30 40 50 60		
16.3 58.3	4.8 16.0	15.0 53.3	~15 ~30 ~15 ~30	~7 ~14 ~7 ~14	±0.02	$1313.00 $1039.00
31.8 86.0	10.3 34.0	40.6 110.0	~30 ~60 ~30 ~60	~15 ~30 ~15 ~30	±0.02	$1596.00 $1322.00
16.3 58.3	4.8 16.0	15.0 53.3	~15 ~30 ~15 ~30	~7 ~12.5 ~7 ~12.5	±0.02	$1313.00 $1039.00
31.8 86.0	10.3 34.0	40.6 110.0	~30 ~60 ~30 ~60	~15 ~30 ~15 ~30	±0.02	$1596.00 $1322.00

Thrust Force [N]	Pushing Force [N]	Maximum Transportable Mass in Horizontal Direction [kg]	Maximum Transportable Mass in Vertical Direction [kg]	Repetitive Positioning Accuracy [mm]	List Price
		10 20 30 40 50 60 70 80 90	10 20 30 40 50 60		
~70	100	~15	~7	±0.02	$1141.00
~140	200	~30	~14		
~70	100	~15	~7		$864.00
~140	200	~30	~14		
~200	400	~30	~15	±0.02	$1246.00
~400	500	~60	~30		
~200	400	~30	~15		$969.00
~400	500	~60	~30		
~70	100	~15	~6	±0.02	$1474.00
~140	200	~30	~13		
~70	100	~15	~6		$1197.00
~140	200	~30	~13		
~200	400	~30	~13	±0.02	$1631.00
~400	500	~60	~28		
~200	400	~30	~13		$1354.00
~400	500	~60	~28		
~70	100	~15	~7	±0.02	$1141.00
~125	200	~30	~12.5		
~70	100	~15	~7		$864.00
~125	200	~30	~12.5		
~200	400	~30	~15	±0.02	$1246.00
~360	500	~60	~30		
~200	400	~30	~15		$969.00
~360	500	~60	~30		
~70	100	~15	~6	±0.02	$1474.00
~125	200	~30	~11.5		
~70	100	~15	~6		$1197.00
~125	200	~30	~11.5		
~200	400	~30	~13	±0.02	$1631.00
~360	500	~60	~28		
~200	400	~30	~13		$1354.00
~360	500	~60	~28		

Sensor Set

This is a sensor set dedicated for the **EAS** Series. The sensor set consists of three sets of a sensor, a sensor installation bracket and a flexible sensor cable with connector 2 m (6.6 ft.) and 1 shield plate. The screws needed for installation are also included. The product name varies depending on the table type, motorized linear slide size and sensor output.

Sensor Type

X-Table Type

Applicable Product	Sensor Output	Product Name	List Price
EAS4	NPN	**PAES-S-4X**	$130.00
	PNP	**PAES-SY-4X**	
EAS6	NPN	**PAES-S-6X**	
	PNP	**PAES-SY-6X**	

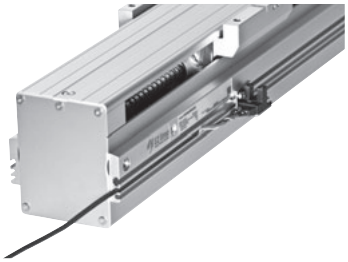
Y-Table Type

Applicable Product	Sensor Output	Product Name	List Price
EAS4	NPN	**PAES-S-4Y**	$130.00
	PNP	**PAES-SY-4Y**	
EAS6	NPN	**PAES-S-6Y**	
	PNP	**PAES-SY-6Y**	

Sensor Installation

Sensor Installation for Motorized Linear Slides

A sensor rail is equipped on both sides of the motorized linear slide. A sensor is included in the sensor set (sold separately) and its location can be fixed.
A sensor cable can be stored in the rail. A shield plate (included in the sensor set) can be installed on the drive table for the X-table type.



● The photo above shows an installation example of the X-table type. For the Y-table type, a shield plate needs to be installed on the load side.

⚠ Safety Precautions

- To ensure correct operation, carefully read the Operating Manual before using it.
- The products listed in this catalog are for industrial use and for built-in components. Do not use for any other applications.

- The content listed in this catalog such as performance and specifications of the products are subject to change without notice for improvements.
- For details of the products, please contact the nearest dealer, sales office or Customer Service Center.
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