

MELSERVO-J5 SERIES SERVO MOTORS

PRODUCT OVERVIEW



- **High performance**
- **Versatile**
- **Compact design**

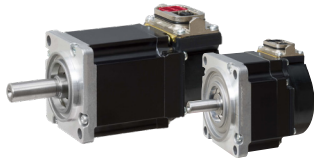
MELSERVO-J5 Servo products set the standard for servo performance in the world of factory automation. Cutting-edge technology, industry leading performance, and advanced servo features allow users to unlock unused potential in their machines and factories.

Mitsubishi Electric Servo motors are designed to fit your exact application requirements and provide industry leading performance. Choose from 4 motor model types (HK-KT/ST/RT/MT) with varying capacities and inertia. New Flexible Drive Capacity provides users with additional combinations that streamline inventory, increase maximum torque capacity, or modify motor performance to meet your exact requirements.

KEY BENEFITS:

- **High Performance** – Industry leading 3.5kHz speed frequency response rate, reduced settling time, and increased servo system responsiveness.
- **Accuracy & Repeatability** – New 26-bit batteryless absolute encoder allows for precision positioning with zero maintenance or batteries.
- **Compact** – Innovations in encoder design and motor construction allow for up to 20% reduction in motor length when compared to previous generation models.
- **Connector** – New single cable design for HK-KT/MT/RT servo motors and tool-less One Touch Lock Connector significantly reduces servo system assembly time.
- **Versatility** – Combine larger capacity servo amplifiers with lower capacity servo motors in order to unlock greater maximum torque capacity (up to 450% maximum torque), reduce inventory by combining one amplifier with multiple motor sizes, or mix amplifier and motor voltages (200VAC/400VAC) to modify motor torque/speed utilization to meet your exact requirements.

MR-J5 SERIES SERVO MOTORS



COMPACT HK-KT SERIES

Small Capacity, Low Inertia

- 26-bit batteryless absolute position encoder
- Rated speed: 3000 r/min (*1)
- Maximum speed: 6700 r/min (*1)

This servo motor is available with a single/dual cable and our new One-Touch Lock connector.



HK-MT SERIES

Small Capacity, Ultra-low Inertia

- 26-bit batteryless absolute position encoder
- Rated speed: 3000 r/min
- Maximum speed: 10000 r/min (available with the high-speed type models) (*2)

This servo motor is available with a single/dual cable and our new One-Touch Lock connector.

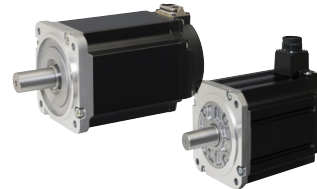


HK-ST SERIES

Medium Capacity, Medium Inertia

- 26-bit batteryless absolute position encoder
- Rated speed: 2000 r/min – 3000 r/min

This servo motor is available with our new One-Touch Lock connector for power, encoder, and brake cables.



HK-RT SERIES

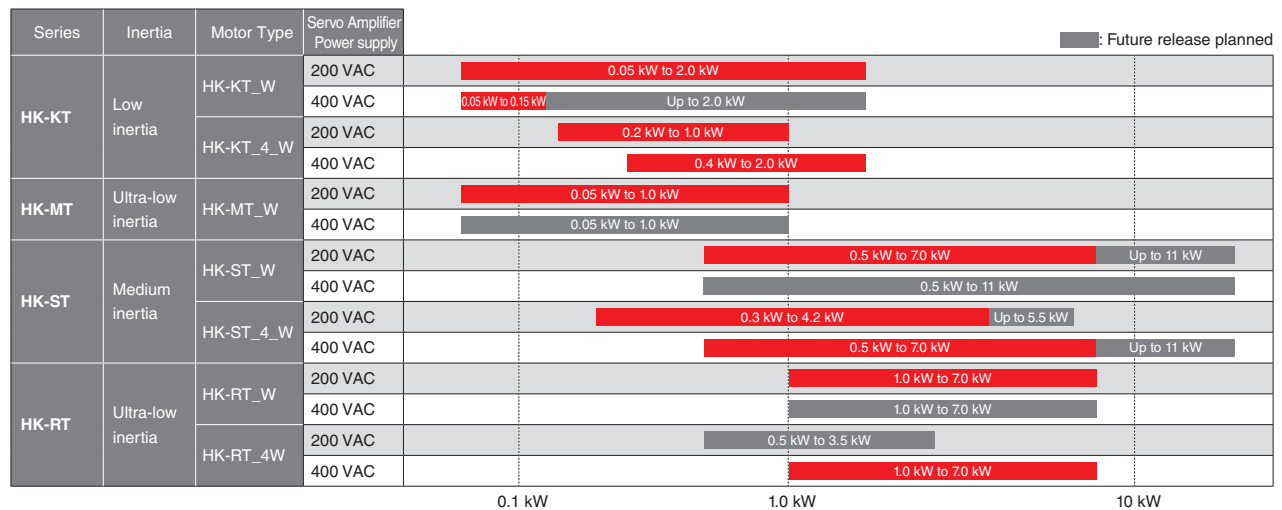
Medium Capacity, Ultra-low Inertia

- 26-bit batteryless absolute position encoder
- Rated speed: 3000 r/min
- Maximum speed: 6700 r/min (*1)

This servo motor is available with our new One Touch Lock connector for single/dual cable design (up to 2kW) and power encoder, and brake (3.5kW–7kW).

1. The speed varies by the model type.
2. The high-speed type models are equipped with an incremental encoder.

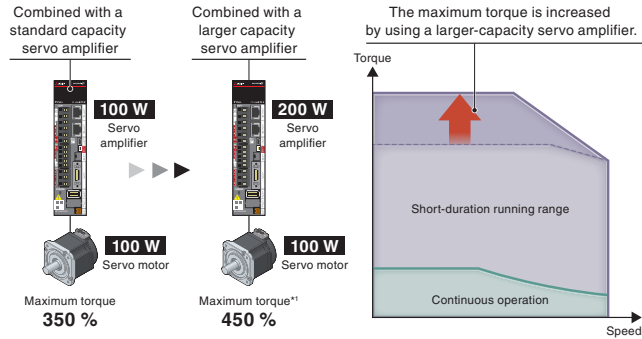
Increased Performance



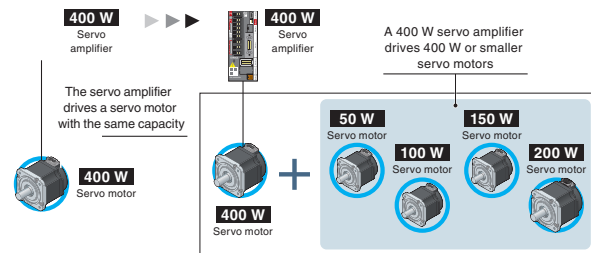
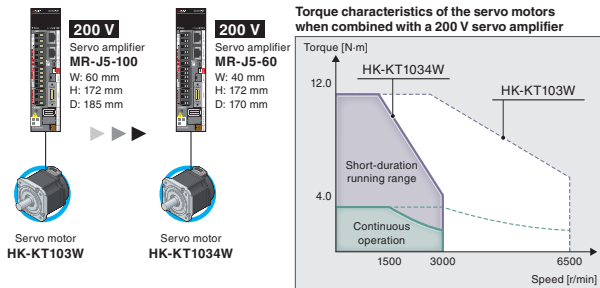
Note: The motor types are classified by the power class (200 V or 400 V) of the servo motors. The servo motors can be driven regardless of the servo amplifier power supply.

MELSERVO-J5 Servo amplifiers are designed to provide users with more options when selecting servo motors. Using larger servo amplifiers will increase the allowable maximum torque sizing area, are compatible with multiple power capacities and frame sizes, and can be used for 200VAC and 400VAC motors. Maximize your servo drive potential.

Versatile

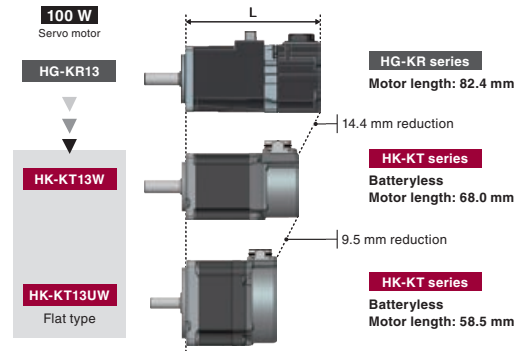


*1. When the maximum torque of HK-KT 13W servo motor is increased with the 200 W servo amplifier.



MELSERVO-J5 Servo motors offer increased torque density providing customers with improved performance in a smaller footprint.

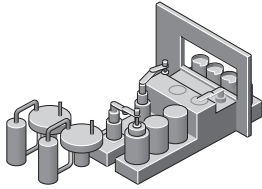
Compact Design



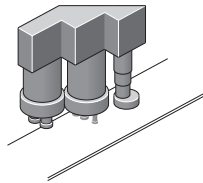
Application Examples

While there are endless applications for AC Servo Motors in Factory Automation settings here are some more common examples.

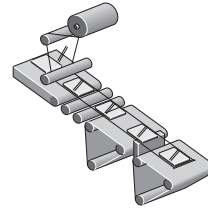
Semiconductor/FPD/photovoltaic manufacturing systems



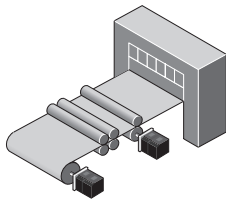
Mounters/bonders



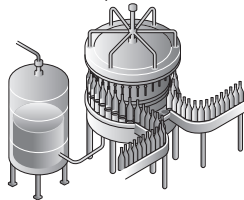
Food packaging machines



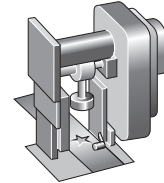
Loaders/unloaders, feeders and sliders



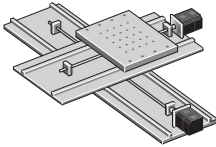
Food processing machines (filling machines, mixers, measuring machines, etc.)



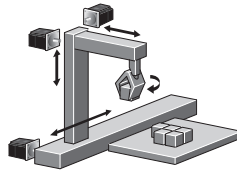
Press machines



X-Y tables



Robots



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