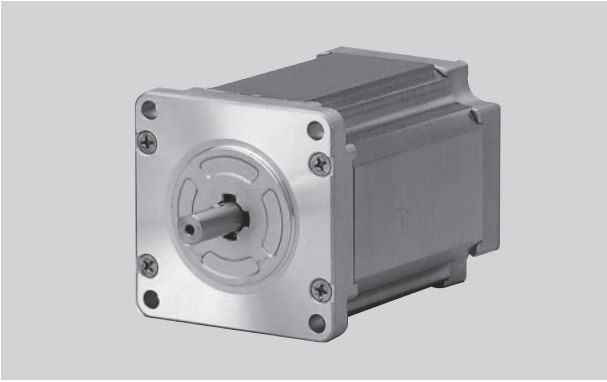
In-Vacuum Stepping Motors

Custom product



Features

- These can be driven in vacuum environments without requiring a vacuum feedthrough. These stepping motors can be used as an actuator suitable for vacuum environments while maintaining the feature of a stepping motor—easy high-precision open-loop control.
- We also offer customization for use in a wide range of pressure environments from low vacuum to ultra-high vacuum.
- Baking at 200°C is possible.
- No significant size change from regular stepping motors.

Operable pressure environments

Low vacuum			Medium vacuum			High vacuum					Ultra-high vacuum			
10^5	10^4	10^3	10^2	10^1	1	10^{-1}	10^{-2}	10^{-3}	10^{-4}	10^{-5}	10^{-6}	10^{-7}	10^{-8}	[Pa]

Applications

Ideal for the following applications. Contact us to discuss your particular application environment needs.

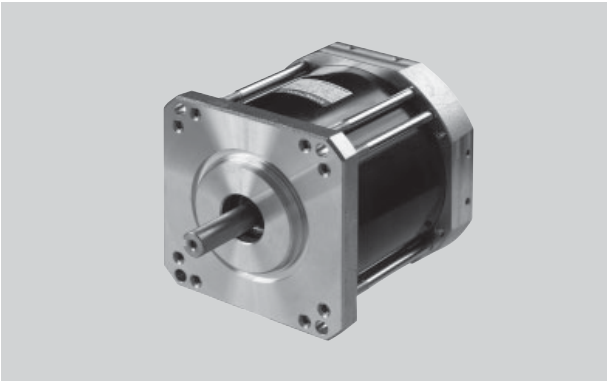
- Semiconductor manufacturing equipment
- Satellite robots
- Electron microscopes
- Large-scale research facilities such as accelerators, synchrotron radiation analysis equipment, etc.

Motor size

42 mm sq. to ø106 mm

Synchronous Motors

Custom product



Features

- Synchronous motors rotate at a constant speed in proportion to the AC power frequency without been affected by voltage or load level variations, preventing motor step-out.
- These motors can drive at ultra-low speeds with high torque without using gears.
- Since an AC power supply can be directly connected to the motor, a drive circuit is not required, simplifying your system.
- In addition to 2-phase motors, we also offer 3-phase motors, which don't require a phase shifter.
- Certification for safety standards acquired.

Applications

Ideal for the following applications. Contact us to discuss your particular application environment needs.

- Belt conveyors
- Printers
- Cryopumps
- Cryocoolers
- Switching devices

Motor size

56 mm sq. to ø106 mm