

Applied Motion Products

Motion Control Solutions for Factory Automation



CONNECTED • CUSTOMIZED • CLOSED LOOP

StepSERVO™ PRODUCTS



Do you want a quieter, more efficient motor?

StepSERVO™ closed-loop stepper products are quieter and consume less power than their open-loop counterparts. That means a better solution for noise-sensitive applications where traditional step motors are too loud. It also means less heat generated by the motor because StepSERVO™ motors only draw the current they need to move the load.



Do you want faster and more accurate positioning?

StepSERVO™ closed-loop stepper products offer up to 50% more torque than traditional step motors due to their peak torque capacity. This increased torque allows you to accelerate faster. High-resolution encoders and closed-loop servo control ensure higher overall system accuracy.

StepSERVO™ Closed Loop Integrated Motors

- Closed-loop stepper technology
- Higher acceleration rates
- Increased machine throughput
- Higher efficiency
- Quieter operation
- NEMA frame sizes 11 through 34
- IP65 options with M12 connectors
- Multiple control and communication options
- Intuitive and user-friendly software for tuning and programming



StepSERVO™ Motors and Drives

- All the benefits of StepSERVO™ Integrated Motors in separate motor and drive components
- Ideal for applications where panel-mount drives are preferred



STEPPER PRODUCTS

Integrated Steppers

 Motor, drive and control all-in-one. Integrated steppers combine our high performance drives with our robust motor offering into a single motor package.

 Space-saving design means reduced system cost and less panel space required per axis.

 No more wiring between the drive and motor saves cost and allows motors to be more easily mounted all over the machine.

 IP65 rated integrated motors for use in wet and dusty environments.

 Multiple control and communication options permit integration into a wide variety of machine designs.



Stepper Drives

 Advanced control algorithms offer best-in-class torque and speed performance for step motor systems by utilizing anti-resonance and torque ripple smoothing functions.

- Multiple control and communications options permit integration into a wide variety of machine designs.
- Encoder feedback enables Stall Detection and Stall Prevention functions that overcome the biggest drawbacks of open-loop systems.



Stepper Motors

A wide variety of frame sizes from the smallest NEMA 8 to the high torque NEMA 34, as well
as an innovative NEMA 24 design that provides up to 30% more holding torque than the
popular NEMA 23 frame size.

 IP65 rated step motors for wet and dusty environments including machining centers and splash zone applications.

• Encoder options for use with Applied Motion drives to improve overall system performance.

 Customization options for flats, keyways, thru-holes on the shaft, lead screws, hollow shafts, encoder holes, shielded cables and special connectors.

SERVO PRODUCTS

Integrated Servo Motors

• High-torque servo motors and all digital servo drives combine in a single package to create integrated servo motors.

- Cost-effective without sacrificing performance, integrated servo motors provide full torque to 3,000 rpm.
- Simplify. Reduce. Save. Integrated servo motors simplify the product selection process, reduce space in control cabinets and save money.

Many options and standard features including IP65 ratings, M12 connectors, dual-port communications and support for industrial networking protocols such as EtherNet/IP and Modbus.



Servo Drives

- Advanced control functions including anti-vibration, programmable notch filters and auto-tuning simplify setup and improve overall system performance.
- Multiple communication options including EtherNet/ IP, Modbus, CANopen, Ethernet TCP/IP, serial RS-232 and RS-485.
- Multiple control options including analog torque/ velocity/positioning, step & direction positioning, commanded torque/velocity/positioning, streaming commands, encoder following, and on-board motion control with the powerful Q programming language.



Servo Motors

 Popular metric frame sizes for easy mechanical integration into any machine design. 40, 60 and 80 mm frame sizes available.

- IP65 ratings for use in dusty environments and the splash zone.
- Holding brakes for use with vertical axes and where power-off holding of position is required.
- A full line of planetary gearheads for optimizing the speed and torque output of each axis. Ratios from 3:1 to 100:1 with backlash as low as 3 arcminutes.



Brushless DC Drives & Motors

- Advanced control technology that features excellent performance and ease of use.
- Long life and low maintenance for applications requiring stable velocity control over a wide speed range.
- Three-phase brushless motors with hall signals for commutation and velocity loop feedback.
- Planetary gearheads for applications demanding high torque.
- Metric frame sizes make mechanical integration easy.
- Dynamic braking enables the motor to stop quickly.
- Two on-board trimpots make setup simple.



Planetary Gearheads

- Efficient and reliable planetary gearheads for servo and stepper motors provide high performance at an attractive price.
- Light but powerful PE planetary gearheads excel with above average weight-to-torque ratios and the high dynamics needed for multiple axis systems.
- Low heat generation, thanks to a low friction bearing design and optimized lubrication, means these gearheads can operate continuously without sacrificing performance.



Custom Drive and Motor Solutions

- Optimize performance with custom firmware and software solutions tailored to your specific requirements.
- Optimize fit with custom hardware, connector and interface options to work with your specific mechanical, wiring and communications needs.
- Build your brand with private labeling options that put your brand front and center.
- Increase your business with unique part numbers linked directly to your machine or application.
- Increase capabilities with customized products that can bridge the gap between what standard products allow you to do and what you really want to do.







WHY CHOOSE APPLIED MOTION?

Connected. We provide communication options for EtherNet/IP, EtherCAT, Modbus and CANopen networks, as well as the easy-to-use SCL protocol for open networks over Ethernet, RS-485 and RS-232 connections.

EtherNet/IP









Customized. If you're looking for motor, drive or integrated motor solutions tailored to your specific design requirements, we have the product line, manufacturing capabilities and experience to provide it for you.

Closed-Loop. Our StepSERVO™ closed-loop stepper technology greatly improves upon traditional step motor performance by providing more torque, faster acceleration, higher system accuracy, better efficiency and guieter operation.

In Stock. Our warehouse in California is filled with motors and drives to meet your production needs. Same day shipments and quick turnaround on prototypes mean your machine life cycle will be well-supported from beginning to end.

Experience. Our technical support and sales staff have the expertise available from years of experience in the motion control and factory automation industries. This experience is just a phone call away.











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