



# Applied Motion Products

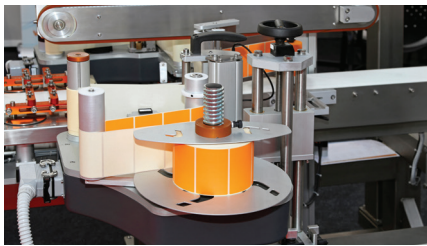
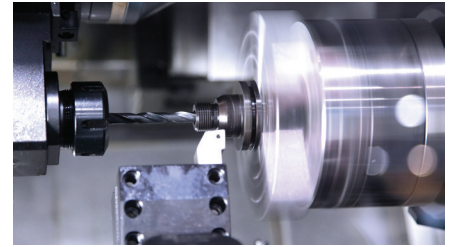
Motion Control Solutions For Factory Automation



CONNECTED - CUSTOMIZED - CLOSED LOOP

## Do you want faster acceleration?

StepSERVO™ closed loop integrated motors offer up to 50% more torque than traditional step motor systems. This is because of the peak torque available from StepSERVO™ motors. This increased torque allows you to accelerate faster.



## Do you want more accurate positioning?

Every StepSERVO™ integrated motor comes with a high resolution incremental encoder: 20,000 counts quadrature for all but the smallest frame size. This encoder permits higher resolution positioning, and in conjunction with closed loop performance ensures a better overall system accuracy.

## Do you want a quieter, more efficient motor?

StepSERVO™ integrated motors 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.



## StepSERVO™ Closed Loop Integrated Motors

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



# 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.



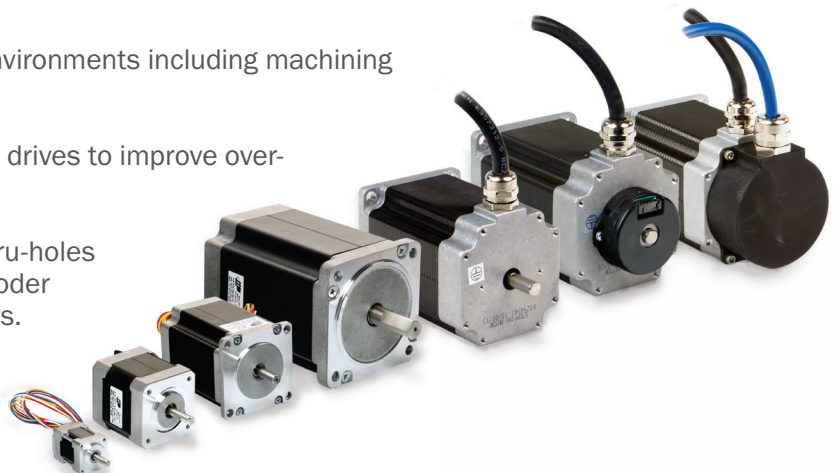
## Stepper Drives

- **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

## 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 arc-minutes.



## Brushless DC Drives & Motors

- **High performance**, high speed stability, basic velocity control, simple setup and low cost in a compact design.
- **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.
- **A wide speed range** is controlled via analog or digital inputs.
- **Metric frame sizes** make mechanical integration easy.
- **Dynamic braking** enables the motor to stop quickly.
- **Two on-board trimpots** make setup simple.

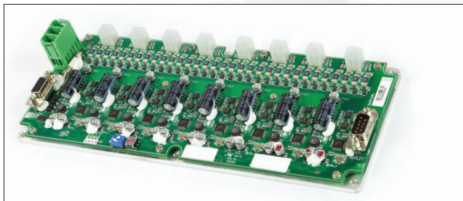


# CUSTOMIZED DRIVE AND MOTOR SOLUTIONS



## Optimize performance.

Custom firmware and software solutions allow you to optimize the performance of your application with commands, features and functions tailored to your specific requirements.



## Optimize fit.

Custom hardware, connector and interface options to work with your mechanical, wiring and communications needs.



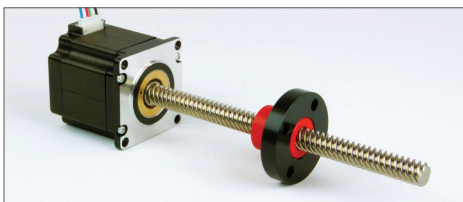
## Build your brand.

Private labeling options put your company's logo and brand front and center, enabling you to build your brand and expand your presence within your industry.



## Increase your business.

Unique part numbers linked directly to your application allow you to protect your spare parts and repairs business.



## Increase capabilities.

Customized products 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 easy-to-use protocols for open networks over Ethernet TCP/IP, RS-485 and RS-232 connections.



**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 quieter 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.

