



ElectroCraft[®] powering innovation[™]



Motion Solutions for Medical and Laboratory Equipment



ElectroCraft is a global provider of dependable, application-engineered fractional-horsepower motor and motion solutions. Our products are found in thousands of applications within industrial, commercial, and consumer product markets. And while ElectroCraft provides a broad lineup of standard products with configurable options, we have built our brand on custom OEM solutions that meet the precise performance, cost and quality that our customers require.

ElectroCraft is headquartered in the United States, with engineering, manufacturing and sales locations throughout North America, Europe and Asia, giving us the ability to provide the right solution, cost effectively to our global customer base.

Our vision is to be the most trusted, valued and responsive motion system partner to our OEM customers, suppliers and employees.

We offer a wide range of product technologies to create unique solutions for OEMs, including AC, PMDC, BLDC and Stepper motors, plus gear reduction solutions, linear and rotary actuators, and drive electronics.

We have many configurable, off-the-shelf products to satisfy most applications, but some of our OEM customers require some level of product customization. Our ability to provide customized solutions, especially for embedded applications, can add a lot of value in terms of cost effectiveness, ease of integration, overall system performance and time to market.

Our mission is to provide a design experience that results in motor and motion systems that deliver superior reliability and performance at the lowest possible cost.





Medical Mobility Solutions

Applications

Powered Wheelchairs • Motorized Hospital Beds • Lifts • Transport Systems

ElectroCraft is a world leader in the design and manufacturing of right-angle gearmotors for a wide range of medical mobility applications including powered wheelchairs, motorized hospital beds, lifts and transport systems. Over one million ElectroCraft gearmotors are in service worldwide. Renowned for their smooth, controlled power delivery with high starting torque, ElectroCraft gear motors provide excellent rough-terrain and curb-climbing performance. Available in a wide range of motor and gearing options, from configurable to fully-customizable, we have a solution to satisfy your specific application requirements.

Products

ElectroCraft MobilePower™ Right-Angle PMDC Gearmotors

ElectroCraft MobilePower™ gearmotors incorporate a powerful PMDC brush motor with a heavy-duty single or two-stage right-angle gearbox, designed specifically for medical mobility applications.

ElectroCraft's integrated design provides increased performance and reliability at an affordable price compared to traditional motor/gearbox combinations.

Features:

- Highly reliable design provides smooth, efficient motion.
- Suitable for uneven terrain and curb-climbing.
- Peak starting torque up to 145 Nm. Continuous torque up to 39 Nm.
- Configurable or completely customizable designs



MP26



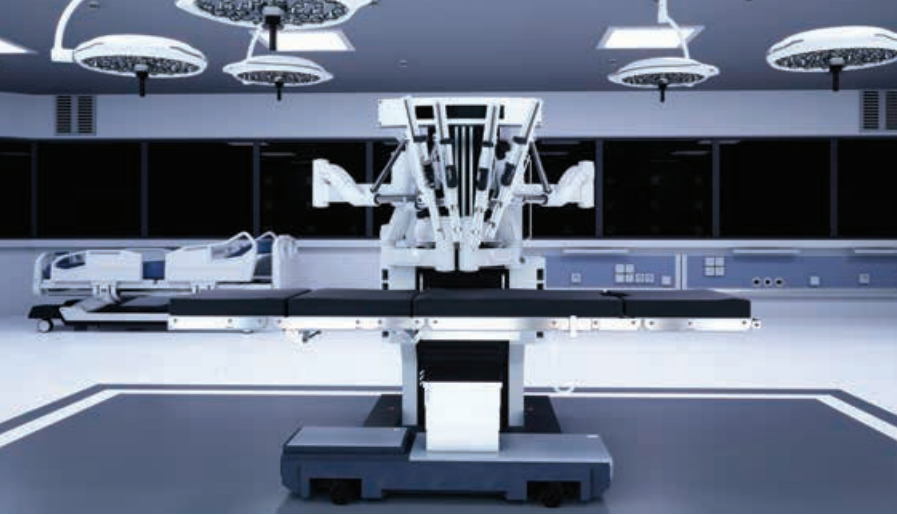
MP36



MPP36



MPS32



Medical Robotic Solutions

Applications

Surgical Robots • Telehealth Robots • Disinfecting Robots • Transport Robots

The implementation of robotic systems for medical applications continues to expand. Either fully autonomous or remotely controlled, these mobile robots utilize battery powered, motorized drivetrains for propulsion. ElectroCraft continues to be an innovative leader in providing rugged, reliable, high-performance solutions, offering a wide range of DC powered motors and drives for practically any type of mobile application.

Products

ElectroCraft MobilePower™ Right-Angle Brushless DC Gearmotors

ElectroCraft MobilePower™ gearmotors incorporate a powerful Brushless DC motor with a heavy-duty two-stage right-angle worm/spur gearbox, built-in encoder feedback and electromagnetic holding brake, designed for battery powered drivetrain applications.

Peak torque up to 153 Nm. Continuous torque up to 77 Nm



ElectroCraft MobilePower™ MPW Series Wheel Drives

ElectroCraft MobilePower™ MPW series wheel drives feature an integrated design that provides increased performance, efficiency, and reliability at an affordable price compared to traditional motor/gearbox/wheel combinations. The MPW incorporates a high torque density brushless DC motor with a heavy-duty planetary gearbox mounted inside the hub of an aluminum wheel with polyurethane tread. Available in two motor frame sizes with a variety of configurations, including winding voltage, gear ratio, wheel size, encoder feedback and electromagnetic brake options.



Peak torque up to 35 Nm. Continuous torque up to 20 Nm.

ElectroCraft CompletePower™ Plus Universal Drive

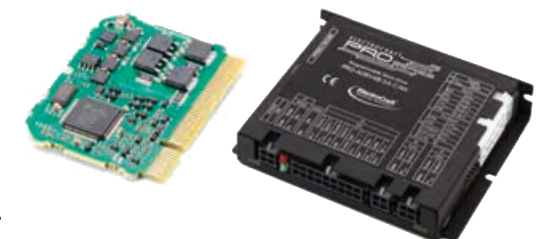
Utilizing state-of-the-art digital drive technology combined with an intuitive and highly configurable user interface, the Universal Drive is ideal for robotic applications, capable of providing speed, torque or position control via discrete I/O or built-in CAN bus communications.

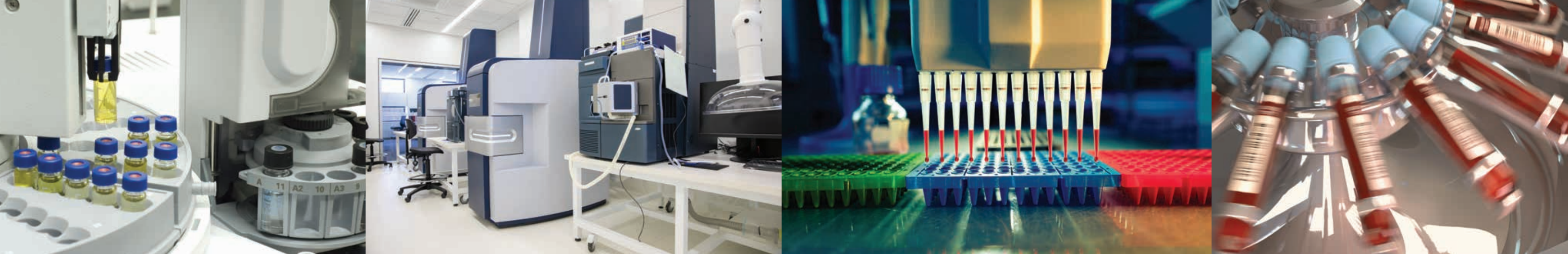
Peak current up to 100A. Continuous current up to 40A.



ElectroCraft Pro Series

For more advanced motion control capability, ElectroCraft's PRO-Series offers much of same capabilities as the Universal Drive, plus a built-in programmable motion controller with CANopen communication or EtherCAT network.





Laboratory Equipment Solutions

Applications

Gas or Liquid Chromatography • Mass Spectrometry • Pipetting • Sample Handling

Laboratory diagnostic and analysis equipment continues to become more automated, resulting in improved accuracy and efficiency. ElectroCraft has decades of experience in providing motor and motion solutions with the performance and quality required for these sophisticated applications.

Products

ElectroCraft TorquePower™ Hybrid Stepper Motors

Available in the most common frame sizes, including NEMA 11, 17, 23 and 34, with holding torques ranging from 18 oz-in up to 1190 oz-in. With 1.8° step angle (0.9° on some models) and 256 micro steps per step, plus optional encoder feedback for closed loop control, hybrid steppers are a perfect solution for a variety of precision positioning applications.

ElectroCraft AxialPower™ Stepper Linear Actuators

For a complete positioning solution, ElectroCraft offers stepper motors with integrated lead screws.

- Captive, non-captive or external nut configurations.
- Several motor stack lengths and winding currents to choose from.
- Imperial or metric leadscrews.
- Open or closed loop feedback.

Peak linear force ratings range from 190 N (43 lbs.) on the smallest frame size to an incredible 1779 N (400 lbs.) on the largest frame size. A variety of resolutions are offered, depending on frame size and leadscrew selection, ranging from 0.0060 mm to 0.0635 mm per full step.



ElectroCraft RapidPower™ Xtreme Series, Brushless DC Motors and Gearmotors

The RPX is a powerful and highly dynamic small-frame brushless DC motor. With an advanced multi-pole, encapsulated core design, this compact motor series offers extremely high torque density at a very affordable price, allowing for equipment downsizing and greater performance in a smaller footprint.

The RPX series is available in five frame sizes (16mm, 22mm, 32mm, 40mm, 52mm) each with 12, 24 or 48 VDC windings, with hall sensors or optional encoder feedback.

This versatile motor series is powerful, durable, energy efficient and has a sleek form factor; ideal for embedded applications. By adding a planetary gearbox, the LRPX offers even greater torque output within the same small frame size of the RPX motors.

The result is a small form factor brushless DC gear motor that can produce incredibly high torque at low speeds.



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Medical & Lab Pumping Solutions

Applications Pumping & Dispensing

Whether it's fluid, gas or vacuum applications, medical and laboratory pumps require high-quality motor and drive solutions to accurately control volume, pressure and flow. ElectroCraft's PMDC, BLDC and Stepper systems provide the ideal solution for practically any type of pump design. Small in size and low in noise, yet powerful and highly reliable, ElectroCraft motor and drive solutions are working in hospitals and labs around the world on a daily basis.

Products

ElectroCraft PMDC motors & gearmotors

Ideal for light to medium duty, intermittent operation applications. Available as motor only or with optional spur or planetary gearheads. Excellent performance at a very affordable price.

ElectroCraft TorquePower™ Hybrid Stepper Motors

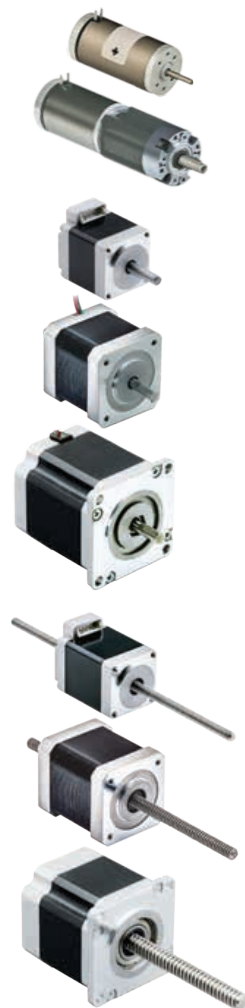
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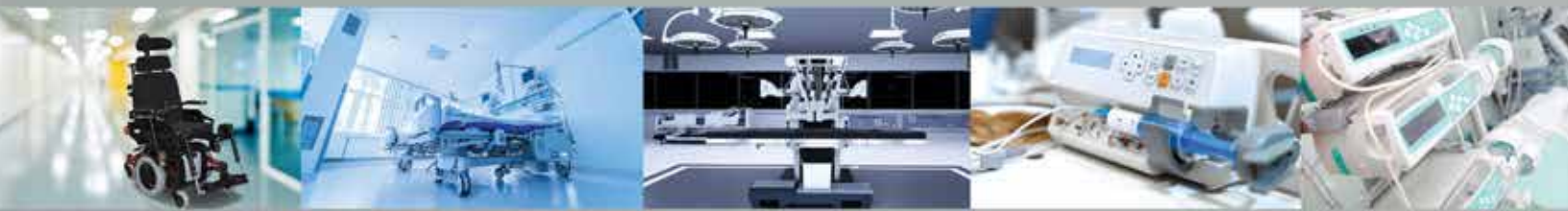
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Global Locations



For OEM Customers who are unsatisfied with having to design around inflexible off-the-shelf products, our technical knowledge and customizable product families provide for a design experience which results in motor and motion systems that provide superior reliability and performance at the lowest possible cost.

From Configurable to Fully Customizable Motor and Motion Control Solutions



844.338.8114

www.electrocrafter.com

Your Genius. Our Drive.