

90ECF Brushless Flat Motor Offers Extremely High Torque and Reduced Complexity in a Compact Envelope

Portescap is excited to announce the launch of the 90ECF brushless DC flat slotted motor, which is the newest – and largest – motor to join our flat motor portfolio. The 90ECF features a performance-optimized design that utilizes an outer rotor configuration with an overall body length of 40mm, enabling it to deliver high power density and smooth output torque in a compact package. The standard version is available with hall sensors, while a sensorless option can be made available upon request.

A standout characteristic of the 90ECF is its ability to provide maximum continuous torque up to 1 Nm, making it an ideal choice for miniature applications searching for direct drive solutions. This not only facilitates the elimination of motor accessories like gearheads in certain cases, but also assists in reducing the motion system's overall complexity, thereby providing a lower cost of ownership.

The 90ECF's high torque capabilities and cost-optimized nature make it an ideal solution for a variety of medical and industrial applications. These include robotic applications like wheel drives, exoskeletons, and underwater UAVs; oxygen concentrators; and aerospace and defense applications such as drones and military robots.

About [Portescap](#)

Portescap offers the broadest miniature and specialty motor products in the industry, encompassing coreless brush DC, brushless DC, stepper can stack, gearheads, digital linear actuators, and disc magnet technologies. Our products have served diverse motion control needs in a wide spectrum of applications including medical, life science, instrumentation, automation, aerospace and commercial for more than 70 years.

Portescap has manufacturing centers in the United States and India and utilizes a global product development network with research and development centers in the United States, China, India and Switzerland.