News Release



New 16ECP24 Motor Improves End-user Experience with a Small and Lightweight Design

Portescap expands their brushless slotless DC platform to include the 16ECP24 miniature BLDC motor and the 16ECP24-2A miniature BLDC motor with integrated electronics. The 16ECP24 motors are cost optimized without sacrificing performance or reliability.

The 16ECP24 features a 16mm motor diameter, 24mm in length, that delivers speeds up to 60,000 rpm in a 26 gram package. The compact design provides 4.1 mNm of continuous torque and 7W of continuous power – a more than 70% increase in torque and 40% increase in power in a package that weighs 28% less than similar competitive designs. Device manufacturers can take advantage of the additional torque and power and reduce the size and weight or gain additional performance to improve device robustness. The 16ECP24 is compatible with Portescap's R16 gearbox and M-Sense encoders for applications that require additional torque at lower speeds.

The 16ECP24-2A version features an embedded driver that allows the BLDC motor to be controlled with just 2 wires, similar to a brushed DC motor. The integrated electronics have no impact on the total motor length.

The motors are well suited for miniature pump applications transitioning from brushed DC to BLDC technology to increase life expectancy. They are also ideal for robotic end effectors that replace pneumatic grippers with electric options to provide precision force and position control. The 16ECP24 helps improve performance in medical and instrumentation applications migrating from brushed DC to brushless DC technology.

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.