

Newest BLDC Slotted Motors Deliver Enhanced Autoclavability for Surgical Applications

Portescap Adds Two New Frame Sizes to Surgical Motor Solutions Portfolio

Portescap is excited to introduce the B2010A4 and B0810A1 brushless DC slotted motors, the two newest additions to our Surgical Motor Solutions portfolio. Leveraging Portescap's decades-long expertise in developing sterilizable solutions for surgical hand tool applications, these motors are designed to withstand more than 1,000 autoclave and medical device dishwasher cycles. This is possible due to the improved encapsulation of the windings, which enhances the motors' autoclavability.

The B2010A4 (Size 20) bone mill surgical gearmotor features a 50mm diameter, which is unique in that no other motor supplier offers a sterilizable motor in such a large frame size. The motor's 6 poles and full metal gearhead allows it to achieve a high peak torque of 15Nm while simultaneously providing a continuous, slow rotation for bone mill and bone crusher devices.

With a 20mm frame size, the B0810A1 (Size 8) multi-tools surgical motor fills the gap between Portescap's existing Size 6 and Size 9 SMS motors, making it an ideal choice for device miniaturization. The 4-pole design enables the Size 8 to provide 20% more torque than competitive solutions within the same package size, and its lightweight mass of 110 grams facilitates longer working times for surgical hand tools and decreased surgeon fatigue.

Both the B2010A4 and B0810A1 provide much-needed design flexibility for those within the surgical application space. As its name would suggest, the Size 20 is an ideal choice for bone mill surgical devices, while the Size 8 excels in liposuction, skin grafting, and small bone drill applications.

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.