



Surgical Motor Solutions

30ECA64 UltraEC™ Autoclavable BLDC Motor

First Brushless Slotless Motor for Large Bone Orthopedic Applications

The Ultra 30ECA64 is Portescap's first brushless slotless motor engineered for the battery-powered surgical hand tools market, making it the latest addition to our Surgical Motor Solutions platform. The 30ECA64 features an autoclavable design that can survive up to 500+ sterilization cycles while delivering a high continuous torque up to 110 mNm.

Blending premium performance and cost optimization, this motor is available in both a cannulated and non-cannulated version; the cannulated shaft option features a 4.7mm cannulation to allow for larger K-wires. Its 30mm diameter by 64mm length, combined with its low overall mass of 256g, ensures that it provides clean, controlled cutting without stall in a small, lightweight, and ergonomic package.

The 30ECA64 is perfectly suited for battery-powered surgical hand tool applications, specifically large bone orthopedic applications such as large bone drills, reamers, and saws. It is also ideal for those users planning to shift from brush DC to brushless DC technologies.

Key Features

- Autoclavable >500x cycles
- Cost-optimized slotless design
- 11.1V and 14.8V winding options
- Cannulated and non-cannulated shaft options available

Applications

- Large bone orthopedic saws
- Large bone orthopedic drills
- Large bone orthopedic reamers

Customization

- Custom shafts - flats, knurling, diameter, length
- Coil modifications - resistance and inductance
- Without hall sensors

- ✓ Survives >500 autoclave cycles
- ✓ 110 mNm continuous torque
- ✓ Lightweight at 256 grams

