



Brushless DC Slotted Flat Motors 20ECF

Small Rotor Diameter Ensures Optimal Performance

The 20ECF brushless slotted flat motor is a result of Portescap's long-standing expertise in miniature motor innovation. Featuring a flat and open architectural design within a compact package, the 20ECF provides optimal power without compromising on targeted performance.

The motor's 19mm rotor diameter is notably smaller than the 20mm diameter of competitive solutions, which facilitates the continued miniaturization of application design. The motor's performance is enhanced by its light weight; at 15 grams, it provides a minimum mass savings of 30% as compared to competitor motors.

The design optimization of the 20ECF helps it achieve a 50% improvement in the motor regulation factor relative to standard available solutions.

The 20ECF excels in a variety of medical and industrial applications, being particularly well-suited for surgical and service robotics, lab automation, premium tattoo machines, electric grippers, LiDAR, and pumps. This motor is an ideal choice for those looking for premium motor performance in an increasingly small package size.

✓ 19mm
outer rotor
diameter

✓ Overall mass of
only 15 grams

✓ Max continuous
torque up to 9
mNm

Key Features

- 19mm rotor diameter
- Minimum mass savings of 30%
- Lower heating due to open architecture
- 50% improvement in motor regulation factor

Applications

- Surgical Robotics
- Service Robotics
- Electric Grippers
- LiDAR
- Lab Automation
- Premium Tattoo Machines
- Pumps

Customization

- Coil modifications - resistance and inductance
- Connectors
- Custom shafts
- Different optimization (speed or direction)
- Non-Sensored

