Standard Motor Options

Moog Components Group offers significant engineering design resources to customize your component. As a vertically integrated manufacturer, we can add many options to a baseline selection to ensure that it meets your requirements and minimizes your vendor base. Please refer to the following list of modifications that we routinely encounter, and contact us for additional requirements. Commercially available standard options include, but are not limited to:

1. **Mechanical Options**
   a. Shaft Options, i.e., diameter/length (0-6 inches), precision tolerances, dual shaft extensions, flats, keyways, threads, splines / pinions, tapers, grooves, chamfers, fillets, steps, holes, hollow core, material, finish, hardness (For unhoused parts sets, similar machining modifications apply to rotor core mounting configuration)
   b. End Cap Options, i.e., mounting boss diameter / depth, flange mounting, bolt circle diameter, material, finish
   c. Housing Options, i.e., mounting boss diameter, bolt circle diameter, frameless, material, finish
   d. Electrical Interface Options, i.e., flying leads, custom wire harnesses, connectors, terminals, shielding
   e. Environmental Options, i.e., high / low temperature, IP ratings, autoclavable, conformal coatings, potting / encapsulating, radiation hardened, EMI / RFI mitigation, low outgassing, RoHS / Non RoHS compliance
   f. Special printing, marking, labeling
   g. *Bearing and bearing lube options

2. **Electromagnetic Options**
   a. Motor Winding Options; (Km 1.0 to 100 oz.-in. / sq.rt. watt)
   b. Sensored, sensorless
   c. Hi-pot
   d. *Wire
   e. *Brush
   f. *Magnet

3. **Accessories**
   a. Temp sensing
   b. Pulleys
   c. Flywheels
   d. Integral and external drives (2,000 watts max.)
   e. Resolvers
   f. *Encoders
   g. *Gear heads
   h. *Clutches and brakes

4. **Avionics Specific Options**
   a. Contact Options, i.e., brush, brushless, hairspring, flex-lead
   b. Electrical Performance, i.e., input voltage (1 to 120 volt), current, power, null voltage, phase shift, accuracy (+/-2’ to +/- 2 degrees, to 15 inches on multi-speed units), transformation ratio (up to 5)
   c. Mechanical Performance, i.e., low friction, end-play, limited rotation features

5. **Blower Specific Options**
   a. Speed control – via - PWM, DC voltage, temperature, closed loop, open loop or other standard interface
   b) Serial bus communications – I2C, CANbus, RS232, RS485 and other common communication buses
   c) Inlet and outlet features for mounting to hoses, plenums, etc.
   d) Speed feedback via serial communications, tach out and alarms for speed thresholds
   e) Specialized aerodynamically designed impellers/blades to reduce noise, improve efficiency, withstand harsh environments and special finishes

*All commercially available components can be incorporated into our standard catalog products.*