



Emerson Control Techniques Servo Motors

Servo motors are designed to provide position control by creating mechanical force on specific mechanisms. Servo motors are widely used in manufacturing automation for positioning and other movement applications. Servo motors are usually combined with sensors and a control system to create a positive feedback loop so that positional accuracy can be maintained throughout the process.

Emerson Control Techniques offers a range of servo motors to accommodate the needs of many different applications, including the FM Servo motor series, the NT Servo motor, the XV Servo motor, and two low inertia motor options: the MG Servo motor and the MH Servo motors.

FM Servo Motor Series

The FM series are AC brushless servo motors available in torques from 6.4 lb-in to 647 lb-in and for 230/460 volts. The FM series servo motors are available in a range of sizes, lengths, shaft diameters and front flange mounting arrangements. Rotatable 90-degree connectors and brake options are available. The FM Series motors are sealed to IP65.

NT Servo Motor Series

The NT Series motors are available in torques from 7.5 lb-in to 56 lb-in for 230 volts. The NT Series motors provide very low inertia for applications that require high acceleration and cycle rates, and are available with or without holding brakes. Flanges are available in English (NEMA 23 or 34) or metric (IEC- 72-1) configurations. NT motors can be ordered with MS style connectors, 1-m Flying Leads, or 1-m Flying Leads with MS connectors, or direct connect. All models are rated IP65, but are available with an optional IP67 rating. White epoxy food grade motors are also an option for the NT Series.

XV Servo Motor Series

The XV Series motors are available in torques from 0.95 lb-in to 101 lb-in for 230 volts. The XV Series is a high performance, low inertia motor that provides high torque in a compact package. The XV provides manufacturers with a low-cost solution for their server motor needs. The XV performs best on higher throughputs and smaller machines. The motors are available in four frame Sizes (40, 60, 80 and 130 mm) and speeds ranging from 2000 to 5000 rpm. The XV Series motors are CE, UL, and RoHS approved.

XV Servo Motor Series

The MG Series motors are ideal for dynamic applications, and are available in torques from



5.3 lb-in to 163 lb-in for 230 volts. Neodymium magnets are used in the design to achieve a high torque to inertia ratio. The MG Series have both English (NEMA 23, 34, or 56) and metric (IEC-72-1) flanges available. All models are rated IP65.

The MH Series motors are similar to the MG series, but are designed for a higher torque range: 6 lb-in to 748 lb-in for 460-volt power.