

<b>Motors</b>	<b>Definition</b>	<b>Applications</b>
<b>AC Brushless Motors</b>	AC brushless motors are some of the most popular in motion control. They use induction of a rotating magnetic field, generated in the stator, to turn both the stator and rotor at a synchronous rate. They rely on permanent electromagnets to operate.	metering pumps speed controllers drill machines
<b>DC Brushed Motors</b>	In a DC brushed motor, brush orientation on the stator determines current flow. In some models, the brush's orientation relative to the rotor bar segments is decisive instead. The commutator is especially important in any DC brushed motor design.	Toy Vacuum cleaner
<b>DC Brushless Motors</b>	DC brushless motors were first developed to achieve higher performance in a smaller space than DC brushed motors, and they are smaller than comparable AC models. An embedded controller is used to facilitate operation in the absence of a slip ring or commutator.	Paper machines Generator Electrical Propulsion Cranes CD/DVD players Electric vehicles RC Vehicles Cement Plants
<b>Servo Motors</b>	A servo motor is any motor coupled with a feedback sensor to facilitate positioning; thus, servo motors are the backbone of robotics. Both rotary and linear actuators are used. Low-cost brushed DC motors are common, but are being superseded by brushless AC motors for high-performance applications.	Robotics Camera Auto Focus Metal Cutting & Metal Forming Machines Printers
<b>Stepper Motors</b>	Stepper motors use an internal rotor, electronically manipulated by external magnets. The rotor can be made with permanent magnets or a soft metal. As windings are energized, the rotor teeth align with the magnetic field. This allows them to move from point to point in fixed increments.	3D printers camera platforms plotters scanners

<b>Device</b>	<b>Definition</b>	<b>Application</b>
<b>BJT</b>	Bipolar device, current controlled	Inverters, choppers, UPS
<b>MOSFET</b>	Majority carrier device, voltage controlled	Choppers, low power UPS, SMPS, BLDC Motor
<b>IGBT</b>	Bipolar Device, Voltage Controlled	Inverters, UPS, SMPS, AC motor drives