

Coreless motor is a permanent magnet DC servo motor, compared to common motor, the difference is the use of coreless rotor/stator, also called the coreless rotor/stator. Coreless motor has following advantages:

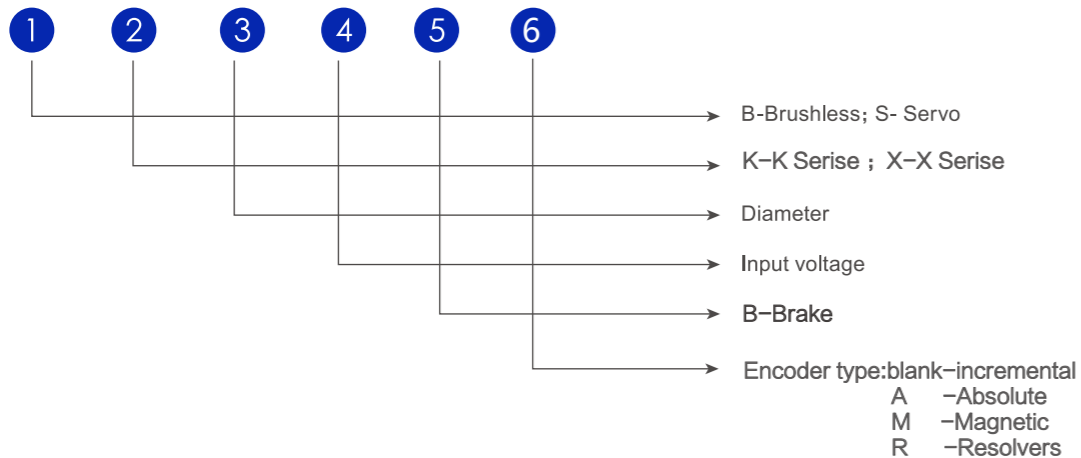
- The maximum energy conversion efficiency (an index of energy saving characteristics): its efficiency in general is more than 70%, some products can reach above 90% (the common core motor at 15–50%);
- Activation, brake fast, fast response: mechanical time constant less than 28ms, part of the product can reach 10 milliseconds, the recommended operating region of the state of high speed run, the flexible speed regulation;
- Reliable operation stability: adaptive ability is strong, speed fluctuation can be controlled within 2%.
- Low electromagnetic interference: using high-quality brush, commutator structure, small commutation spark, can be removed from the additional interference resistant device;
- High energy density: with the same power compared with iron core motor, weight, volume reduce by 1/3–1/2; speed–voltage, speed–torque, speed–current corresponding are presented the standard linear relationship.

Characteristics

- Non iron core, the unique design of high precision oil, thin air gap
- High performance rare earth magnet, high power density
- High torque, high efficiency
- No torque fluctuation
- Excellent volume power ratio, light weight
- Low vibration, high acceleration performance
- Smooth running, quick response
- Low noise
- No cogging
- Low starting torque, wide speed regulating range
- Good heat dissipation effect, low heat, small temperature rise

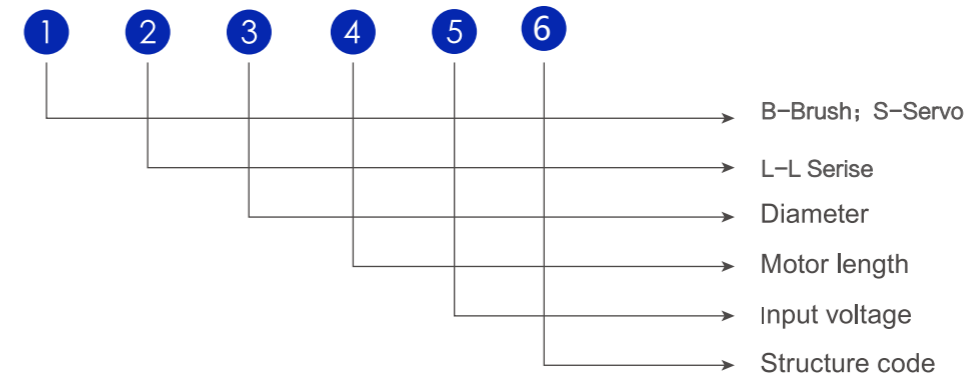
Naming method

BLDC MOTOR (coreless)



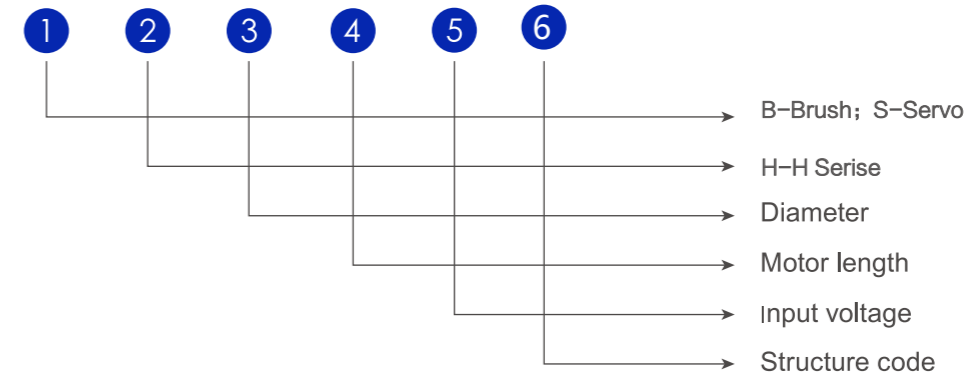
- Example:
1. SK6224B as a K serie brushless motor, diameter 62X62mm, rated voltage 24V, rated power 188w and has brake, the encoder type is incremental.
2. BK6224B as a K serie brushless motor, diameter 62X62mm, rated voltage 24V, rated power 188w and has brake, donot has encoder.

BLDC MOTOR (coreless)



- Example: BL427424 as a L serie DC brushless motor, diameter 42mm, length 74mm, rated voltage 24V.

DC BRUSH MOTOR (coreless)



- Example: BH306824B as a H serie DC brush motor, diameter 30mm, length 68mm, rated voltage 24V.