Micromotors | Coreless BLDC motors | SVTN A 03-1638-12-S-0





SVTN A 03-1638-12-S-0

Nominal voltage 12 V

No load speed 17664 rpm

No load current 100 mA

Nominal speed 14491 rpm

Nominal torque 2.000 mNm

Nominal current 0.430 A

Stall torque 11.130 mNm

Stall current 1.910 A

Max. efficiency 59.500 %

Torque constant 6.110 mNm/A

Speed constant 1562 mNm/V

Notice: The provided technical data are the higher limits recommended in static condition. To obtain the correct dimensioning of the product, it is necessary to hold account of all the applicable dynamic forces, including the inertia of the manipulator, the configuration of the tools and the external forces applied.

2 Pole Brushless DC Motors with Integrated Electronics

SVTN A 03-1638-12-S-0

Speed/torque gradient 1604.00 rpm/mNm

Mechanical time constant 7.200 ms

Rotor inertia 0.400 gcm²

The benefits of this technology join the simplicity of use of a brushed DC motor with the longevity of a brushless motor, maintaining cost-effectiveness and ease of integration. The lack of cogging is typical of the coreless motors and guarantees a reduced ripple torque, a linear correlation between torque, speed, and low inertia. The miniaturization of the electronics allows maintaining the diameter of the motor unvaried with a slight increase in length.



Advantages



Benefits

- Winding technology without metal bodies
- Good heat dissipation and high overload capacity
- Long life expectancy

- Light and compact, easy integration
- High reliability
- Good return on investment
- No need for external drive



expertise in connectivity