Micromotors | Coreless BLDC motors | SVTN A 03-3683-12-D-0





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Nominal voltage 12 V

No load speed 3277 rpm

No load current 137 mA

Nominal speed 2294 rpm

Nominal torque 100.000 mNm

Nominal current 3.040 A

Stall torque 333.000 mNm

Stall current 9.800 A

Max. efficiency 77.800 %

Torque constant 34.500 mNm/A

Speed constant 277 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

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Speed/torque gradient 9.83 rpm/mNm

Mechanical time constant 2.200 ms

Rotor inertia 21.500 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



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