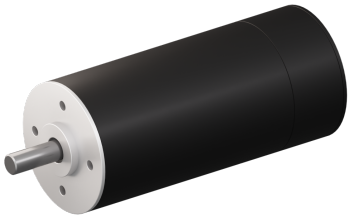

Coreless BLDC motor

Long Lifetime - High Efficiency - Low Noise - High Reliability No Cogging - Low Inertia - Cost-effective

## Feature

| | SVTN A 03-3270-12-S-0 |
|---|---|
| Nominal voltage | 12 V |
| No load speed | 7200 rpm |
| No load current | 194 mA |
| Nominal speed | 6623 rpm |
| Nominal torque | 25.000 mNm |
| Nominal current | 1.780 A |
| Stall torque | 312.000 mNm |
| Stall current | 20.000 A |
| Max. efficiency | 81.300 % |
| Torque constant | 15.800 mNm/A |
| Speed constant | 606 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.

| | SVTN A 03-3270-12-S-0 |
|---|---|
| Speed/torque gradient | 23.10 rpm/mNm |
| Mechanical time constant | 3.700 ms |
| Rotor inertia | 15.500 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

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

## Benefits

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