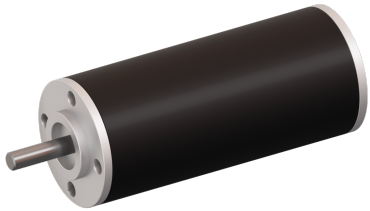

Coreless BLDC motor.

High Power Density - High Efficiency - Cost Effective
Low noise - Low inductance - Good Heat Dissipation
Long Lifetime - No Cogging - Low Inertia - Robust

## Feature

| | SVTN A 01-2864-12-D-O |
|---|---|
| Nominal voltage | 12 V |
| No load speed | 7956 rpm |
| No load current | 182 mA |
| Nominal speed | 6712 rpm |
| Nominal torque | 50.000 mNm |
| Nominal current | 3.680 A |
| Stall torque | 320.000 mNm |
| Stall current | 22.600 A |
| Max. efficiency | 82.800 % |
| Terminal resistance* | 0.500 Ω |
| Terminal inductance* | 0.110 mH |
| Torque constant | 14.290 mNm/A |
| Speed constant | 668 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 01-2864-12-D-O |
|---|---|
| Speed/torque gradient | 24.90 rpm/mNm |
| Mechanical time constant | 2.500 ms |
| Rotor inertia | 9.620 gcm² |

The bene?ts of this new technology are torque and high-speed when compared to the same sizing. The lack of cogging, a reduced ripple torque, a linear correlation between speed and torque, low inertia bring performance to a greater level in terms of power, dynamics by means of reduced weights and reduced dimensions. Servotecnica's brushless motors apply hall sensors as a standard option, in addition to having the magnetic encoder option. Thanks to the sensors it is possible to control rotation speed, and, thanks to the lack of cogging, provide high performance and accuracy.

## 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