variables/V-color

Micromotors | Coreless DC Motors | SVTN B 01-3045-12-S-WG





| | SVTN B 01-3045-12-S-WG |
|----------------------|------------------------|
| Nominal voltage | 12 V |
| No load speed | 7800 rpm |
| No load current | 140 mA |
| Nominal speed | 6942 rpm |
| Nominal torque | 18.300 mNm |
| Nominal current | 1.400 A |
| Stall torque | 166.300 mNm |
| Stall current | 11.600 A |
| Max. efficiency | 79.200 % |
| Terminal resistance* | 1.030 ? |
| Terminal inductance* | [•] 0.110 mH |
| Torque constant | 14.510 mNm/A |
| Speed constant | 650 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 Brushed DC Motors

SVTN B 01-3045-12-S-WG

Speed/torque gradient46.90 rpm/mNmMechanical time constant9.140 ms

SVTN B 01-3045-12-S-WG

Rotor inertia

18.620 gcm²

The specific design construction of a coreless DC motor provides several advantages over the traditional, iron core, technology. A first added value it is given by rotor lower mass and inertia, so very rapid acceleration and deceleration rates are possible. Furthermore, the lack of iron reduces "iron losses" to provide higher efficiencies (up to 90 percent) than traditional DC motors. Last, but not least, the coreless design reduces winding inductance, so sparking between the brushes and commutator is reduced, increasing motor life and reducing electromagnetic interference (EMI). Our Coreless DC Motors are available on a wide range of sizes and we can show high flexibility on custom requirements.





- 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



product engineering services

expertise in connectivity