# Micromotors | Coreless DC Motors | SVTN B 01-4070-24-D-WG





SVTN B 01-4070-24-D-WG

Nominal voltage 24 V

No load speed 7600 rpm No load current 180 mA

Nominal speed 7030 rpm

Nominal torque 181.250 mNm

Nominal current 6.200 A

Stall torque 2416.700 mNm

Stall current80.500 AMax. efficiency90.800 %Terminal resistance\*0.300 ?

Terminal inductance\* 0.083 mH

**Torque constant** 30.090 mNm/A **Speed constant** 316 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 01-4070-24-D-WG

**Speed/torque gradient** 3.10 rpm/mNm

Mechanical time constant 4.420 ms

#### SVTN B 01-4070-24-D-WG

#### Rotor inertia

134.100 gcm<sup>2</sup>

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.



#### 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



## expertise in connectivity