# Micromotors | Slotless BLDC motor | SVTN A 02-2053-48-S-O





SVTN A 02-2053-48-S-O

Nominal voltage 48 V

**No load speed** 50700 rpm

No load current 68 mA

**Nominal speed** 46188 rpm

Nominal torque 10.000 mNm

Nominal current 1.180 A

Stall torque 112.000 mNm

Stall current 12.600 A Max. efficiency 85.800 % Terminal resistance\* 3.820 ?

**Terminal inductance\*** 0.380 mH

**Torque constant** 8.990 mNm/A **Speed constant** 1062 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.

### **High-Speed Brushless DC Motors**

SVTN A 02-2053-48-S-O

**Speed/torque gradient** 451.00 rpm/mNm

Mechanical time constant 3.900 ms

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#### Rotor inertia

0.830 gcm<sup>2</sup>

Typically employed in the medical field for surgical tools, these motors merge the SVTN A Series characteristics to an optimized project for high-speed functions. Thanks to a precise balancing of the rotor and the use of special bearings, maximum stability, and low noise are guaranteed.



#### 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



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