



Slotless BLDC motor

High Speed - Long Lifespan - Cost Effective Low Inertia - High Efficiency - Low Noise - High Reliability

 Feature

SVTN A 02-2053-18-S-O	
Nominal voltage	18 V
No load speed	50202 rpm
No load current	136 mA
Nominal speed	45684 rpm
Nominal torque	10.000 mNm
Nominal current	3.070 A
Stall torque	111.000 mNm
Stall current	32.700 A
Max. efficiency	87.500 %
Terminal resistance*	0.550 $\Omega$
Terminal inductance*	0.060 mH
Torque constant	3.410 mNm/A
Speed constant	2801 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 02-2053-18-S-O

Speed/torque gradient	452.00 rpm/mNm
Mechanical time constant	3.900 ms
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

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



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