

Coreless BLDC motor.

SVTN A 01-4088-48-D-O micro motor for coreless torque brushless control

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

 Feature

SVTN A 01-4088-48-D-O	
Nominal voltage	48 V
No load speed	8081 rpm
No load current	200 mA
Nominal speed	7452 rpm
Nominal torque	200.000 mNm
Nominal current	3.740 A
Stall torque	2570.000 mNm
Stall current	45.700 A
Max. efficiency	87.200 %
Terminal resistance*	1.100 Ω
Terminal inductance*	0.780 mH
Torque constant	56.470 mNm/A
Speed constant	169 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 BRUSHLESS DC MOTORS

SVTN A 01-4088-48-D-O

Speed/torque gradient	3.10 rpm/mNm
Mechanical time constant	1.800 ms
Rotor inertia	54.140 gcm <sup>2</sup>

The benefits 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



Zoning de la Rivière, 65  
7330 Saint-Ghislain (Belgium)

T : +32 (0)65 76 40 40  
E : service@pes-sa.com