



Coreless BLDC motor.

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

 Feature

SVTN A 01-4058-48-S-O	
Nominal voltage	48 V
No load speed	8001 rpm
No load current	110 mA
Nominal speed	6986 rpm
Nominal torque	85.000 mNm
Nominal current	1.610 A
Stall torque	670.000 mNm
Stall current	11.900 A
Max. efficiency	81.700 %
Terminal resistance*	4.000 Ω
Terminal inductance*	1.670 mH
Torque constant	56.760 mNm/A
Speed constant	168 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 01-4058-48-S-O

Speed/torque gradient	11.90 rpm/mNm
Mechanical time constant	3.700 ms
Rotor inertia	29.620 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