



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 01-1630-18-S-O	
Nominal voltage	18 V
No load speed	23511 rpm
No load current	150 mA
Nominal speed	19506 rpm
Nominal torque	3.500 mNm
Nominal current	0.650 A
Stall torque	21.000 mNm
Stall current	3.100 A
Max. efficiency	60.900 %
Terminal resistance*	5.800 Ω
Terminal inductance*	0.170 mH
Torque constant	6.960 mNm/A
Speed constant	1373 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 01-1630-18-S-O

Speed/torque gradient	1144.20 rpm/mNm
Mechanical time constant	5.700 ms
Rotor inertia	0.480 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



product  
engineering  
services

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

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