



SS and S Tech

Sole Solution for Motor Technology

[It's Time to Switch to Brushless Motors]

Money Saving Motors!

Brushless motors will save you maintenance cost especially if your application requires many hours in operation.

S&S Tech is able to offer you a 24/7 duty brushless dc motor with an affordable price.



Brushless Motor VS. Brush Motor Comparison Chart

Features	Brushless Motor	Brush Motor
Neodymium Magnet	Yes	Maybe
Current Surge (Inrush) Free	Yes	No
Optional Stall-lock Protection	Yes	No
Dual Ball Bearings	Yes	Maybe
80+% Efficiency	Yes	No
Carbon Dust Free	Yes	No
Spark Free	Yes	No
Long Life	Yes	No
Low-power Speed Control	Yes	No

[It's Time to Switch to Brushless Motors]

Neodymium Magnet

Permanent magnet made of neodymium means higher magnetic density. This feature enables our brushless motor to have a smaller package so its electronic controller can be integrated to the motor yet still has the a standard size of a brush dc motor.

Current Surge (Inrush) Free

A typical brush dc motor has current surge (inrush) from each start that draws an enormous amount of current that is harmful to the electronics of a vehicle. Our brushless motor has a current limiting circuit built in so no inrush would occur for each start.

Optional Stall-lock Protection

This feature is offered as an option. This feature enables our brushless motor to sense a stall caused by a debris and turn itself off so no overloading would occur. After a minute, the motor will attempt to start again to check if stall is still present, if so, the motor will turn itself off again and the cycle continues.

Dual Ball Bearings

We use ball bearings on all of our brushless motors. No sleeve bearings.

80+% Efficiency

Thanks to a more efficient electronic commutation, our brushless motor can achieve 80+% efficiency. This means that less energy is needed from a vehicle.

Carbon Dust Free

A brush motor will generate carbon particles due to the wear of its carbon brushes. Such carbon particles are harmful to people when they are circulated in the air. A brushless motor uses electronic commutation so it is carbon dust free.

Spark Free

Since our brushless motor has no carbon brushes, it has no sparks. No spark means no interference to radio devices.

Long Life

Thanks to our motor's electronic commutation, there will never be carbon brushes to wear out. That means long life.

Low-power Speed Control

The built-in electronic speed control unit means no need of using an inefficient resistor box. Further more, thinner 5v signal wires mean less wire space required to install and less electrical hazard to concern about.

[XFAN Brushless Electric Fans 10",12",14",16"]

Voltage Options:

12V, 24V, 36V, 48V

Available Fan Sizes:

10", 12", 14", 16"

Rotation:

Non-reversible CW, CCW; Special reversible version is available upon requests

Motor Housing:

Die-cast Aluminum

Controller:

Integrated, potted, and replaceable, has current limiter, "smooth start" to prevent current inrush, reverse polarity protection, optional stall lock protection, handles load dump

Wire Options:

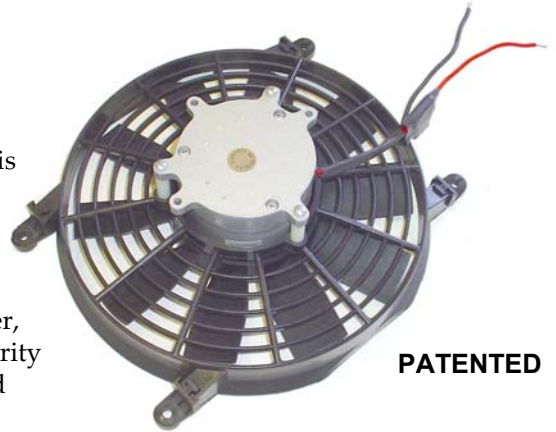
2-wire standard, PWM or 0-5vdc signal wires available upon requests

Bearings:

Ball-bearings

Sound Level:

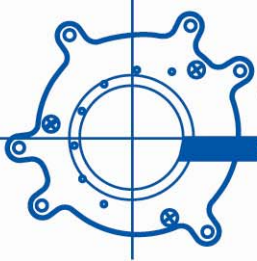
78 dBA 1 meter



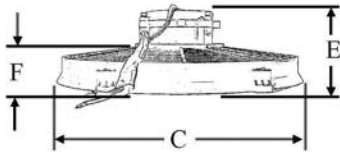
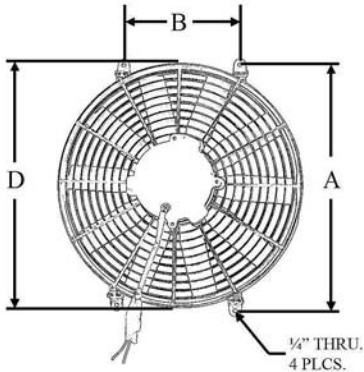
PATENTED

13.8 V											
10" Fan			12" Fan			14" Fan			16" Fan		
F	S	A	F	S	A	F	S	A	F	S	A
829	0.0	9.8	1146	0.0	13.2	1527	0.0	18.3	1619	0.0	17.2
720	0.2	10.2	980	0.2	13.5	1300	0.2	18.3	1420	0.2	17.2
630	0.4	10.6	800	0.4	13.8	1080	0.4	18.4	1020	0.4	17.3
450	0.6	11.0	500	0.6	14.3	760	0.6	18.6	370	0.6	17.4
180	0.8	11.4	220	0.8	14.5	180	0.8	18.7	0	0.7	17.6
0	1.0	12.5	0	0.9	15.4	0	0.9	19.0	-	-	-

27.6 V											
10" Fan			12" Fan			14" Fan			16" Fan		
F	S	A	F	S	A	F	S	A	F	S	A
900	0.0	5.3	1244	0.0	6.4	1814	0.0	15.3	1923	0.0	14.4
781	0.2	5.5	1064	0.2	6.6	1544	0.3	15.3	1686	0.3	14.4
684	0.5	5.8	868	0.5	6.8	1283	0.6	15.4	1211	0.6	14.5
488	0.7	6.0	543	0.7	7.1	903	0.8	15.6	439	0.8	14.6
195	0.9	6.3	239	0.9	7.3	214	1.1	15.7	0	1.0	14.7
0	1.1	7.0	0	1.1	7.8	0	1.3	15.9	-	-	-



[XFAN Brushless Electric Fans 10",12",14",16"]



Note: Please contact us for replacement parts.



Dimensions in inches				
Dim\Size	10"	12"	14"	16"
A	11.19	13.06	14.75	16.75
B	6.94	6.25	7.13	7.75
C	10.75	12.00	14.38	16.00
D	11.31	12.88	14.88	16.75
E	3.25	3.38	4.00	4.13
F	2.00	2.00	2.13	2.13

Standard Part Numbers			
Size	Voltage	Pusher	Puller
10"	12V	PN00205	PN01205
12"	12V	PN00305	PN01305
14"	12V	PN00405	PN01405
16"	12V	PN00505	PN01505
10"	24V	PN00705	PN01705
12"	24V	PN00805	PN01805
14"	24V	PN00905	PN01905
16"	24V	PN01005	PN02005

[YFAN Brushless Electric Fans 10" to 18"]

Voltage Options:

12V, 24V, 36V, 48V

Available Fan Sizes:

Specify your own size(s) up to 18" in diameter

Rotation:

Non-reversible CW, CCW; Special reversible version is available upon requests

Motor Housing:

Die-cast Aluminum

Controller:

Integrated, potted, and replaceable, has current limiter, "smooth start" to prevent current inrush, reverse polarity protection, optional stall lock protection, handles load dump

Wire Options:

2-wire standard, PWM or 0-5vdc signal wires available upon requests

Bearings:

Ball-bearings

Performance Curve(s):

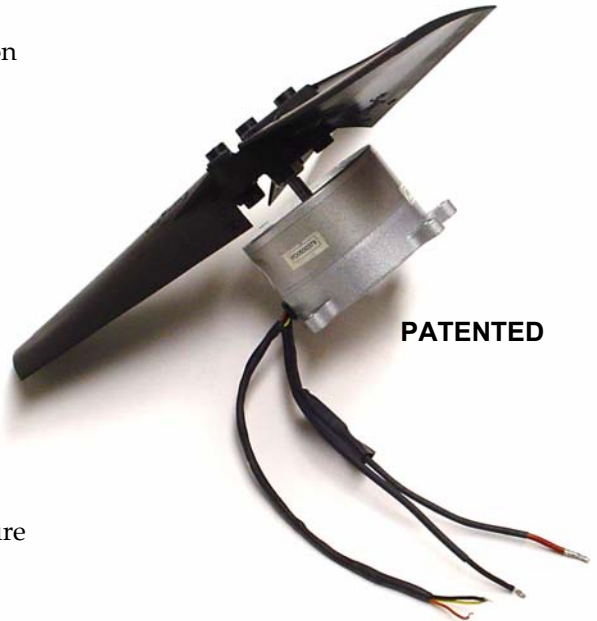
We can provide you complete flow vs. static pressure curves based on your specifications

Volumetric Flow Rate:

up to 2700 CFM depending on your fan size

Static Pressure:

up to 1" of water



Part Numbering: PN00306 – AAA – BBB – CC – DD

AAA:

012 for 12vdc,
024 for 24vdc,
036 for 36vdc,
048 for 48vdc,
115 for 115vdc/vac,
230 for 230vdc/vac,
460 for 460vdc/vac

BBB:

PUS for air pusher,
PUL for air puller

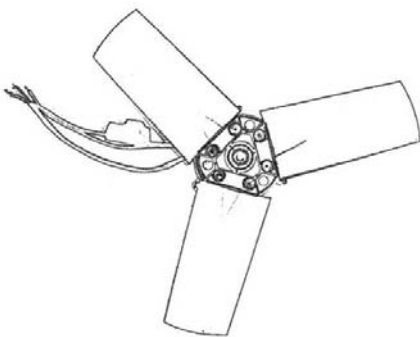
CC:

02 for 2-wire fixed speed,
05 for speed control option

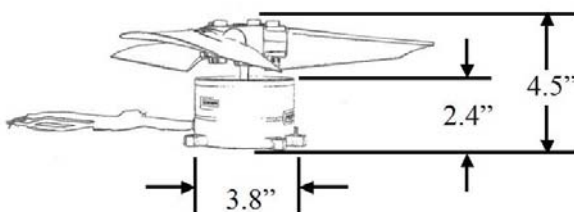
DD: 10 to 18 for 10" to 18" fan size(s)

Example: PN00306-012-PUL-02-15

This means air puller Yfan at 12v with fixed speed and fan blade in diameter of 15 inches.



YFAN Dimensions



[YFAN Brushless Electric Fans 10" to 18"]

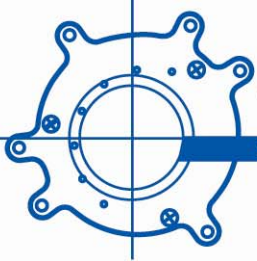
- Do you need a **bigger fan**?
- Does your application require **higher air flow**?
- Does your application require **higher static pressure**?

No problem!

Please contact us for more information.

S & S tech can design an electric fan based on your specifications.

We are your **Sole Solution for Motor Technology**.



SSTech

Sole Solution for Motor Technology

[Brushless Electric Dual Scroll Blower]

Voltage Options:

12V, 24V, 36V, 48V

Available Housing Sizes:

Many standard sizes, please contact us for more information

Motor Output Power:

160 Watts

Motor Efficiency:

Up to 85%

Controller:

Integrated, potted, and replaceable, has current limiter, "smooth start" to prevent current inrush, reverse polarity protection, optional stall lock protection, handles load dump

Wire Options:

2-wire standard, PWM or 0-5vdc signal wires available upon requests

Bearings:

Double Ball-bearings

Color Options:

Silver, Black



Standard Part Numbers

Voltage	Part Number
12V	PN03105
24V	PN03205

[3" Diameter Brushless Dual "D" Shaft Motor]

Voltage Options:

12V, 24V, 36V, 48V

Rotation:

Non-reversible CW, CCW

Output Power:

160 Watts

Efficiency:

Up to 85%

Shaft Options:

Any upon requests

Body Length:

4.75"

Housing:

Die-cast Aluminum

Magnet:

Neodymium (Rare-Earth)

Controller:

Integrated, potted, and replaceable, has current limiter, "smooth start" to prevent current inrush, reverse polarity protection, optional stall lock protection, handles load dump

Wire Options:

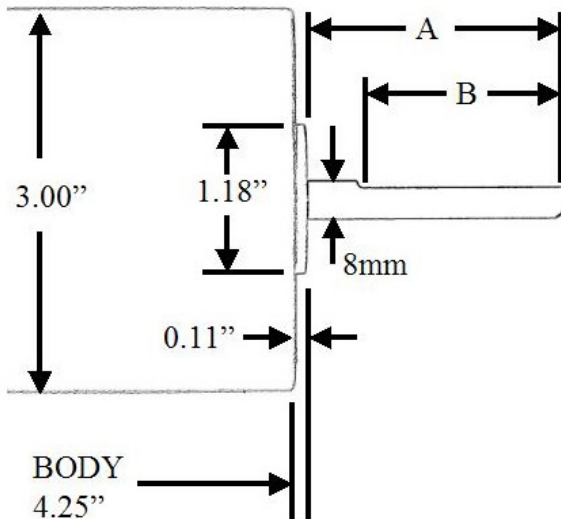
2-wire standard, PWM or 0-5vdc signal wires available upon requests

Bearings:

Double Ball-bearings

Color Options:

Silver, Black



Standard Part Numbers			
Volts	Dim. A	Dim. B	Part #
12V	2.72"	1.43"	PN02705-D
24V	2.72"	1.43"	PN02805-D
12V	3.85"	1.50"	PN02705-E
24V	3.85"	1.50"	PN02805-E

[3" Diameter Brushless Single "D" Shaft Motor]

Voltage Options:

12V, 24V, 36V, 48V

Rotation:

Non-reversible CW, CCW

Output Power:

160 Watts

Efficiency:

Up to 85%

Shaft Options:

Any upon requests

Body Length:

4.75"

Housing:

Die-cast Aluminum

Magnet:

Neodymium (Rare-Earth)

Controller:

Integrated, potted, and replaceable, has current limiter, "smooth start" to prevent current inrush, reverse polarity protection, optional stall lock protection, handles load dump

Wire Options:

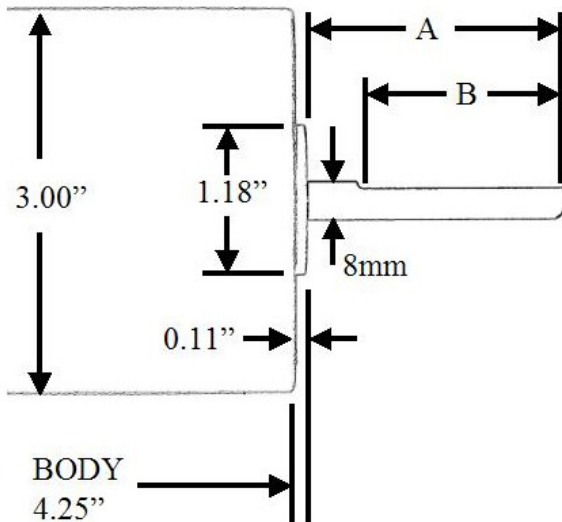
2-wire standard, PWM or 0-5vdc signal wires available upon requests

Bearings:

Double Ball-bearings

Color Options:

Silver, Black



Standard Part Numbers			
Volts	Dim. A	Dim. B	Part #
12V	2.04"	1.61"	PN00207-B
24V	2.04"	1.61"	PN00307-B
12V	2.72"	1.43"	PN00207-C
24V	2.72"	1.43"	PN00307-C

Note: Please add CW or CCW to indicate motor's rotation. CW for clockwise; CCW for counter-clockwise

Ex.: PN00207-C-CCW

[3" Diameter Brushless Electric Fan Motor]

Voltage Options:

12V, 24V, 36V, 48V

Rotation:

Non-reversible CW, CCW

Output Power:

160 Watts

Efficiency:

Up to 85%

Shaft Options:

Any upon requests

Body Length:

4.75"

Housing:

Die-cast Aluminum

Magnet:

Neodymium (Rare-Earth)

Controller:

Integrated, potted, and replaceable, has current limiter, "smooth start" to prevent current inrush, reverse polarity protection, optional stall lock protection, handles load dump

Wire Options:

2-wire standard, PWM or 0-5vdc signal wires available upon requests

Bearings:

Double Ball-bearings

Color Options:

Silver, Black



Standard Part Numbers		
Voltage	Clockwise	Counter-Clockwise
12V	PN02905CW	PN02905CCW
24V	PN03005CW	PN03005CCW



SS^{PURE}**Tech**

www.sstechusa.com

Tel. (626) 322-9203 | Fax. (619) 839-3891
675 Brea Canyon Rd., Suite 11, Walnut, California 91789