SAVÖX

Bonded by Quality:
Built for Performance

2013

SAVÖX

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SAVOX 2013 PRODUCTS CATALOG

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Company Profile

Savox is a professional and enthusiastic manufacturer of model key components. Specializing in Servo, Brushless Motor, Gyro, and Electronic Speed Controls.

Our professional and experienced R&D team is striving for developing superb performance, most reliable and compatible products that offer ultimate fun and best value to end users. With rigid commitment to innovative technology and reliable quality, Savox has launched first-in-the world 12 bits 4096 resolution digital servo comprising coreless motor and titanium alloy gears in November 2007.

In each single of our product is checked and tested through a series of strict and accurate QC (Quality Control) process by leading edge facilities and trained engineers.After three years effort, Savox becomes one of RC leading brand in the world. To improve Savox scales through the new heights.

◀ CNC Video measuring system; Nikon, Japan

◀ CMM; DEA, Italy

◀ Profile roughness and waviness tester; Hommel, Germany

In 2009, Tricore Corporation vertical integrated Tricore group' resource and provide Savox more than 20yrs experience in processing to enhance the ability of developments and quality of products.

▶ Bonded by Quality: Built for performance

Technology

Digital servo has greater holding power than the analog servo when the servo against the load.

Product Overview

1.Digital vs Analog Servo

To start with, lets look at how a servo works: when twitching the transmitter, the receiver sends a signal to the servo and the microprocessor of the servo interfaces with the feedback potentiometer.
And then the amplifier and the amp send a signal to the servo motor instructing it what to do. You could find the difference from the following list,

(1)Analog amplifiers send a signal telling the motor what to do 50 times per second, digital amplifiers send a signal up to 300 times per second to the servo motor.
(2)Digital servo has greater holding power than the analog servo when the servo against the load.
(3)The develop of full output power , analog is about 2 degrees from the central point, digital is under 1 degree only.
(4)Digital servo has faster control response and more accuracy than analog one.

2.Brushless Motor vs Brushed Motor

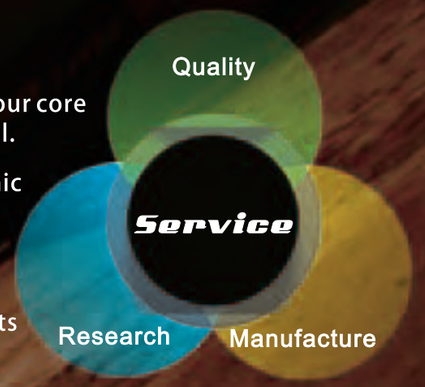
A brushless motor , as the name suggests, is the motor has no brushes or mechanical commutator connecting to the rotor. Without physically contacting and rubbing, the brushless motor is able to work more efficiently and smoothly.
Here are the main features of brushless motor：

- Longer lifetime.
- Sustaining in a greater range of voltaqge and current.
- Hassle free on maintaining: Time and Money saving on carbon brush replacing.
- Larger power for greater enjoyment and excitement.

3.Coreless Motor

Coreless motor consists of a self-supporting skew-wound copper coil instead of iron core in the armature, thus it could be made smaller and lighter than the core type. Because of the zero eddy current losses on it, a coreless motor has higher efficiency and greater power output than traditional motor.In addition, it also has the character of low starting voltage and inertia, rotates without cogging torque and this could once again provide the smooth and fluent operating.Typically the coreless motor are become the spokesman of the top grade servo.

SAVOX Advantage



•Quality Savox owns the best quality of technology,it makes our core materials and product to reach the international level.

•Research Savox owns professional R&D team and best electronic equipments.

•Manufacture Savox owns capable production lines. We could produce 3000pcs servo per day,800pcs brushless motor per day. 90% components of Savox products are produced by ourselves.

•Service Savox always provides the best service and products to our clients.

QUAD FLYER

Razor

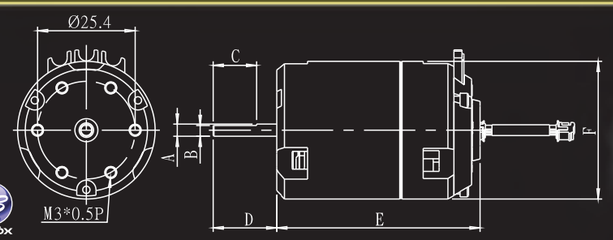
Continuous Current : 160A (Phase)
Peak Current : 400A (Phase)
Motor Limit : Over 4.0 Turns
Motor Type : Sensored 3650 sizes brushless motor
BEC : 6V

NEW

BLH-3670
BLH-3650

Sensored Brushless Inner Runner Motor

Item no.	Turn	RPM/V (KV)	Dimension (mm)	Shaft size (mm)	Max. current (A)	Max. power (W)	Weight	Voltage	A	B	C	D	E	F
BLH-3670	4.5T	4600	Ø 35.8 * 70.0 (Ø 1.41" * 2.76")	Ø 5.00 * 76.46	77	924	250.0g (8.82oz)	4-10 NiCd / NiMH 2-3s LiPo	Ø5	4.5	12.2	16.35	70	35.8
BLH-3650	4.5T	8000	Ø 35.8 * 52.9 (Ø 1.41" * 2.08")	Ø 3.17 * 59.43	79	584	180.0g (6.4oz)	4-6 NiCd / NiMH 2s LiPo	Ø3.175	2.8	11.3	16.55	52.9	35.8
	5.5T	6400			65	481								
	6.5T	5600			55	407								
	7.5T	4900			50	370								
	8.5T	4400			48	355								
	9.5T	3900			45	333								
	10.5T	3550			42	310								
	13.5T	2950			33	244								
	17.5T	2200			25	185								
	21.5T	1800			20	148								
	23.5T	1600			18	133								



BLH-3650

BLH-3670

X3

Specification

- Crossing Distance : 330mm (Shaft go Shaft)
- Propeller Size : 8 in.
- Motor : 1050KV brushless motor
- ESC : 10A
- Weight : 400g (Flying weight without Battery)
- Maximum Flying Weight : 1100g (Including Payload and Battery)
- Battery : 7.4V to 11.1V (2S to 3S liPo)
- Flying duration : 7~20 minutes
  (It may vary according to battery capacity and Payload)

SAVÖX

NEW
BRUSHLESS MOTOR DEFINITION

BSM-4750
RPM/V: 910 KV
Dimension: ∅46.0*49.5 mm
(∅1.81"*1.95")
Max. current : 68 A
Max. power : 1960 W

WATERPROOF

2BB Aluminum
SW-1210SG

Dimensions(mm):40.6*20.7*42.0

4.8V	S 0.18	T 16.0/222.2	Unique steel
6.0V	S 0.15	T 20.0/277.7	71.0 g

1BB Plastic
SW-0230MG

Dimensions(mm):41.8*20.2*38.0

6.0V	S 0.16	T 6.5/90.3	Metal
7.4V	S 0.13	T 8.0/111.1	59.0 g

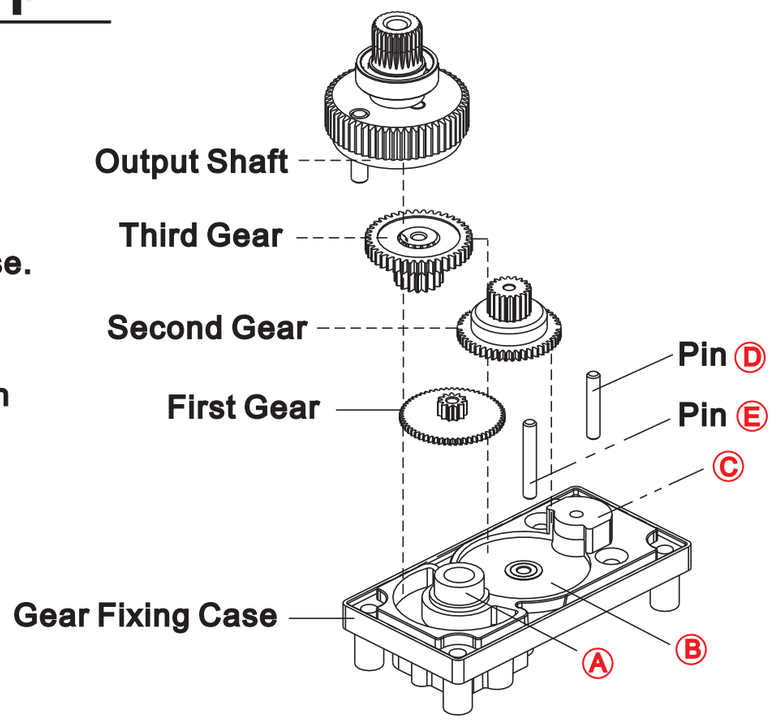
Assembling Step

1.Put the first gear on the position Ⓑ of the gear fixing case.

2.Place output shaft on the position Ⓐ of gear fixing case.

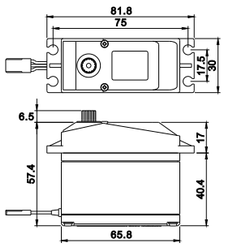
3.Set up the pin Ⓓ through the hole position Ⓒ of the case , then go through second gear and fix on the position.

Put the third gear onto the first gear , then insert the pin Ⓔ through first and third gear.



GIANT

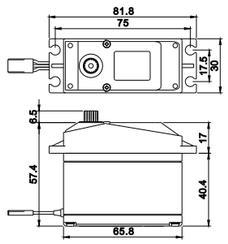
2BB Aluminum SV-0235MG



Dimensions(mm):65.8*30.0*57.4
200.0 g | Metal

6.0V	0.18	28.0/388.8
7.4V	0.15	35.0/486.1

2BB Aluminum SV-0236MG



Dimensions(mm):65.8*30.0*57.4
200.0 g | Metal

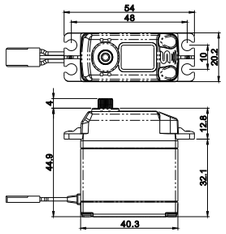
6.0V	0.21	30.0/416.6
7.4V	0.17	40.0/555.5

Car | Airplane | Helicopter | Boat

2BB Bearing | Aluminum Case | Speed (sec/60°) | Torque (kg-cm /oz-in) | Weight (g) | Gear

STANDARD

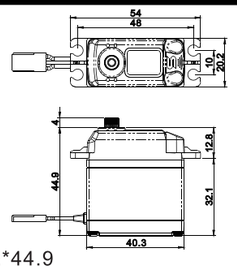
2BB Aluminum SA-1230SG



Dimensions(mm):40.3*20.2*44.9
79.0 g | Unique steel

4.8V	0.20	30.0/416.6
6.0V	0.16	36.0/499.9

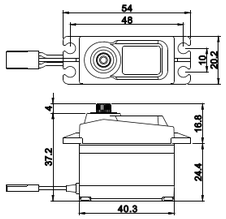
2BB Aluminum SA-1231SG



Dimensions(mm):40.3*20.2*44.9
79.0 g | Unique steel

4.8V	0.18	28.0/388.8
6.0V	0.14	32.0/444.4

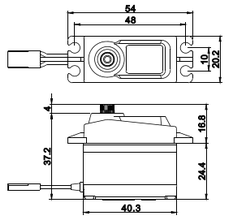
2BB Aluminum SA-1256TG



Dimensions(mm):40.3*20.2*37.2
52.4 g | Titanium alloy & Aluminum

4.8V	0.18	16.0/222.2
6.0V	0.15	20.0/277.7

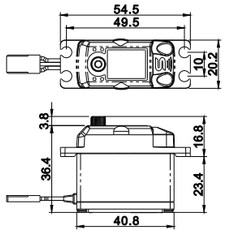
2BB Aluminum SA-1258TG



Dimensions(mm):40.3*20.2*37.2
52.4 g | Titanium alloy & Aluminum

4.8V	0.10	9.6/133.3
6.0V	0.08	12.0/166.6

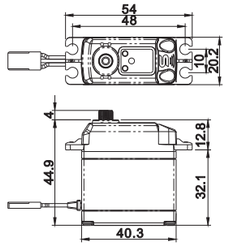
2BB Aluminum SA-1283SG



Dimensions(mm):40.8*20.2*36.4
80.0 g | Unique steel

4.8V	0.16	25.0/347.2
6.0V	0.13	30.0/416.6

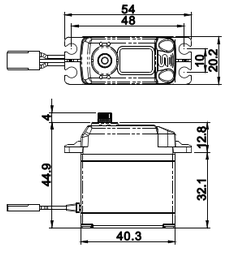
2BB Aluminum SB-2230SG NEW



Dimensions(mm):40.3*20.2*44.9
84.0 g | Unique steel

6.0V	0.16	36.0/499.9
7.4V	0.13	42.0/583.3

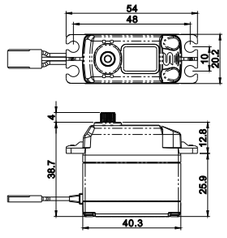
2BB Aluminum SB-2231SG NEW



Dimensions(mm):40.3*20.2*44.9
84.0 g | Unique steel

6.0V	0.14	32.0/444.4
7.4V	0.10	40.0/555.5

2BB Aluminum SB-2270SG

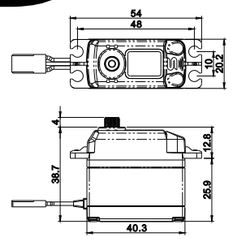


Dimensions(mm):40.3*20.2*38.7
69.0 g | Unique steel

6.0V	0.15	25.0/347.2
7.4V	0.12	32.0/444.4

STANDARD

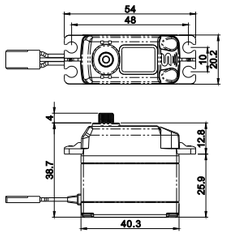
2BB Aluminum SB-2271SG



Dimensions(mm):40.3*20.2*38.7
69.0 g | Unique steel

6.0V	0.085	15.0/208.3
7.4V	0.065	20.0/277.7

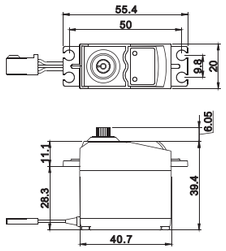
2BB Aluminum SB-2272MG



Dimensions(mm):40.3*20.2*38.7
66.0 g | Metal

6.0V	0.045	5.0/69.4
7.4V	0.032	7.0/97.2

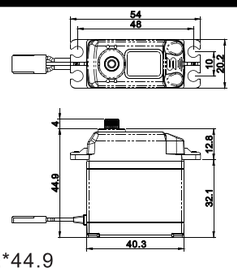
2BB Plastic SC-0352



Dimensions(mm):40.7*20.0*39.4
42.0 g | Industrial plastic

4.8V	0.14	4.2/58.3
6.0V	0.11	6.5/90.3

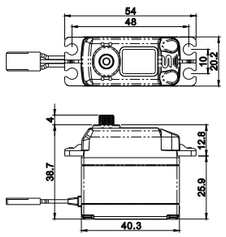
2BB Aluminum SC-1232SG



Dimensions(mm):40.3*20.2*44.9
79.0 g | Unique steel

4.8V	0.15	18.0/250.0
6.0V	0.13	22.0/305.5

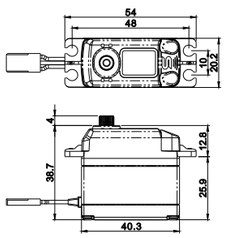
2BB Aluminum SB-2273SG



Dimensions(mm):40.3*20.2*38.7
69.0 g | Unique steel

6.0V	0.12	23.0/319.4
7.4V	0.095	28.0/388.8

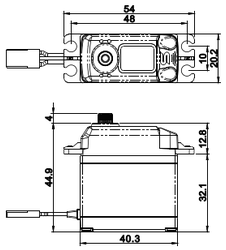
2BB Aluminum SB-2274SG



Dimensions(mm):40.3*20.2*38.7
69.0 g | Unique steel

6.0V	0.105	20.0/277.7
7.4V	0.08	25.0/347.2

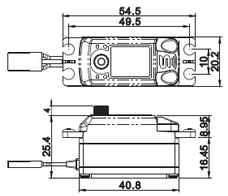
2BB Aluminum SC-1233SG



Dimensions(mm):40.3*20.2*44.9
79.0 g | Unique steel

4.8V	0.08	10.0/138.9
6.0V	0.07	13.0/180.5

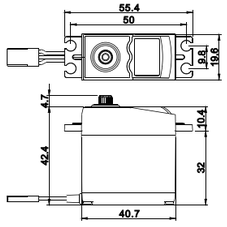
2BB Aluminum SC-1251MG



Dimensions(mm):40.8*20.2*25.4
44.5 g | Metal

4.8V	0.10	7.0/97.2
6.0V	0.09	9.0/125.0

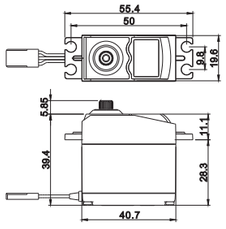
2BB Plastic SC-0251MG



Dimensions(mm):40.7*19.6*42.4
61.0 g | Metal

4.8V	0.2	13.0/180.5
6.0V	0.18	16.0/222.2

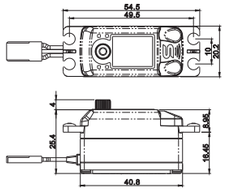
2BB Plastic SC-0252MG



Dimensions(mm):40.7*19.6*39.4
49.0 g | Metal

4.8V	0.23	7.2/100.0
6.0V	0.19	10.5/145.8

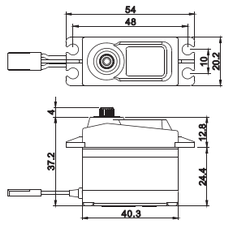
2BB Aluminum SC-1252MG



Dimensions(mm):40.8*20.2*25.4
44.5 g | Metal

4.8V	0.08	4.5/62.5
6.0V	0.07	7.0/97.2

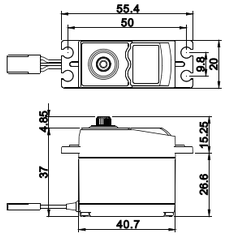
2BB Aluminum SC-1256TG



Dimensions(mm):40.3*20.2*37.2
52.4 g | Titanium alloy & Aluminum

4.8V	0.18	16.0/222.2
6.0V	0.15	20.0/277.7

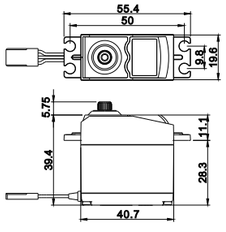
1BB Plastic SC-0253MG



Dimensions(mm):40.7*20.0*37.0
59.0 g | Metal

4.8V	0.17	4.0/55.5
6.0V	0.15	6.0/83.3

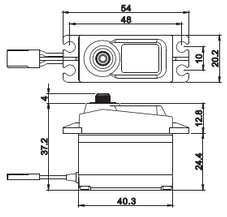
2BB Plastic SC-0254MG



Dimensions(mm):40.7*19.6*39.4
49.0 g | Metal

4.8V	0.19	6.2/86.1
6.0V	0.14	7.2/100.0

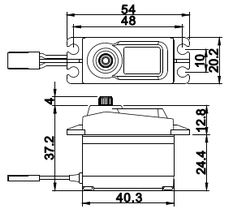
2BB Aluminum SC-1257TG



Dimensions(mm):40.3*20.2*37.2
52.4 g | Titanium alloy & Aluminum

4.8V	0.09	8.0/111.1
6.0V	0.07	10.0/138.9

2BB Aluminum SC-1258TG



Dimensions(mm):40.3*20.2*37.2
52.4 g | Titanium alloy & Aluminum

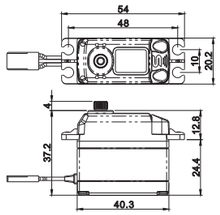
4.8V	0.10	9.6/133.3
6.0V	0.08	12.0/166.6

Car | Airplane | Helicopter | Boat

2BB Bearing | Aluminum Case | Speed (sec/60°) | Torque (kg-cm /oz-in) | Weight (g) | Gear

STANDARD

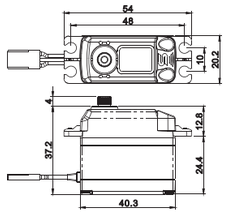
2BB Aluminum
SC-1267SG



Dimensions(mm):40.3*20.2*37.2
62.0 g | Unique steel

6.0V	0.11	13.0/180.5
7.4V	0.095	20.0/277.7

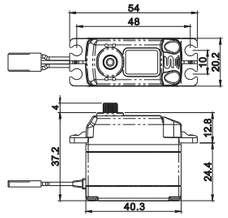
2BB Aluminum
SC-1268SG



Dimensions(mm):40.3*20.2*37.2
62.0 g | Unique steel

6.0V	0.13	15.0/208.3
7.4V	0.11	25.0/347.2

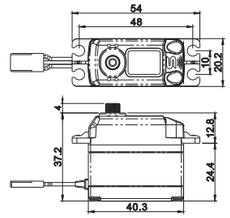
2BB Aluminum
SV-1272SG NEW



Dimensions(mm):40.3*20.2*37.2
63.0 g | Unique steel

6.0V	0.13	23.0/319.4
7.4V	0.10	30.0/416.6

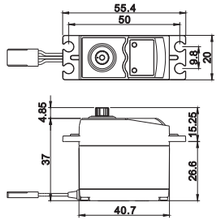
2BB Aluminum
SV-1273TG NEW



Dimensions(mm):40.3*20.2*37.2
56.0 g | Titanium alloy & Aluminum

6.0V	0.08	14.0/194.4
7.4V	0.065	16.0/222.2

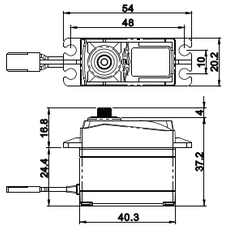
1BB Plastic
SG-0351



Dimensions(mm):40.7*20.0*37.0
41.0 g | Industrial plastic

4.8V	0.22	3.2/44.4
6.0V	0.17	4.1/56.9

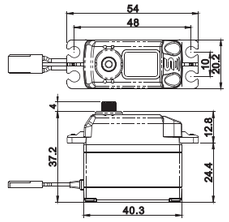
2BB Aluminum
SH-1290MG



Dimensions(mm):40.3*20.2*37.2
56.4 g | Metal

4.8V	0.06	4.0/55.5
6.0V	0.05	5.0/69.4

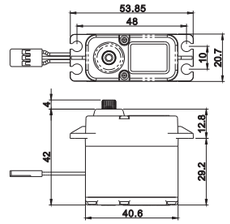
2BB Aluminum
SV-1274MG NEW



Dimensions(mm):40.3*20.2*37.2
61.0 g | Metal

6.0V	0.045	5.0/69.4
7.4V	0.032	7.0/97.2

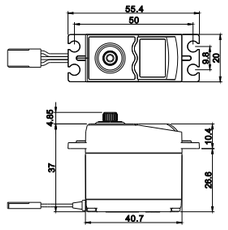
2BB Aluminum
SW-1210SG WATERPROOF NEW



Dimensions(mm):40.6*20.7*42.0
71.0 g | Unique steel

4.8V	0.18	16.0/222.2
6.0V	0.15	20.0/277.7

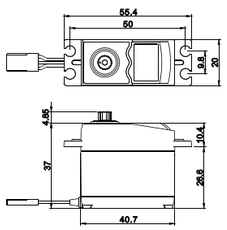
1BB Plastic
SV-0220MG



Dimensions(mm):40.7*20.0*37.0
59.0 g | Metal

6.0V	0.16	6.5/90.3
7.4V	0.13	8.0/111.1

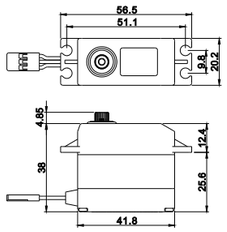
1BB Plastic
SV-0320



Dimensions(mm):40.7*20.0*37.0
46.0 g | Industrial plastic

6.0V	0.16	4.5/62.5
7.4V	0.13	6.0/83.3

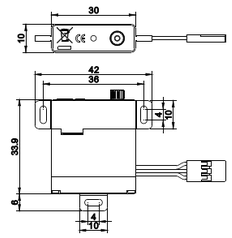
1BB Plastic
SW-0230MG WATERPROOF NEW



Dimensions(mm):41.8*20.2*38.0
59.0 g | Metal

6.0V	0.16	6.5/90.3
7.4V	0.13	8.0/111.1

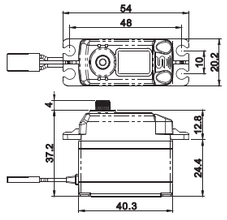
2BB Plastic
SG-0210MG NEW



Dimensions(mm):30.0*33.9*10
18.0 g | Metal

4.8V	0.28	2.8/38.9
6.0V	0.22	3.7/51.4

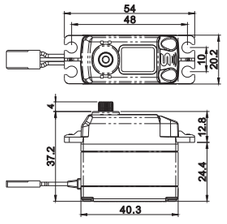
2BB Aluminum
SV-1270TG NEW



Dimensions(mm):40.3*20.2*37.2
56.0 g | Titanium alloy & Aluminum

6.0V	0.14	26.0/361.1
7.4V	0.11	35.0/486.1

2BB Aluminum
SV-1271SG NEW



Dimensions(mm):40.3*20.2*37.2
63.0 g | Unique steel

6.0V	0.11	20.0/277.7
7.4V	0.08	25.0/347.2

Car | Airplane | Helicopter | Boat

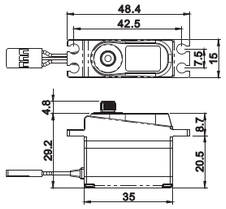
2BB Bearing | Aluminum Case | Speed (sec/60°) | Torque (kg-cm /oz-in) | Weight (g) | Gear

Dario Balestri
European Champion

4 times European Champion
4times Italian Champion
Un countable, result in Amain

MINI

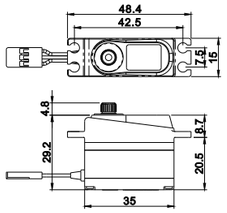
2BB Aluminum
SH-1250MG



Dimensions(mm):35.0*15.0*29.2
29.6 g | Metal

4.8V	0.13	3.7/51.4
6.0V	0.11	4.6/63.9

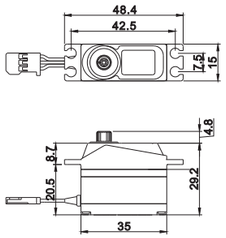
2BB Aluminum
SH-1257MG



Dimensions(mm):35.0*15.0*29.2
29.5 g | Metal

4.8V	0.09	1.9/26.4
6.0V	0.07	2.5/34.7

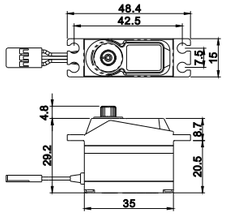
2BB Aluminum
SH-1350



Dimensions(mm):35.0*15.0*29.2
26.0 g | Industrial plastic

4.8V	0.13	3.7/51.4
6.0V	0.11	4.6/63.9

2BB Aluminum
SH-1357

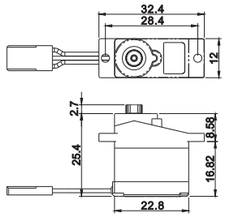


Dimensions(mm):35.0*15.0*29.2
26.0 g | Industrial plastic

4.8V	0.09	1.9/26.4
6.0V	0.07	2.5/34.7

MICRO

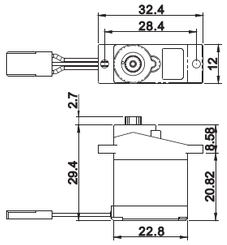
1BB Aluminum
SH-0253



Dimensions(mm):22.8*12.0*25.4
13.6 g | Metal & Plastic

4.8V	0.13	1.8/25.0
6.0V	0.09	2.2/30.6

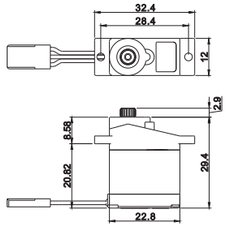
1BB Aluminum
SH-0254



Dimensions(mm):22.8*12.0*29.4
15.8 g | Metal & Plastic

4.8V	0.16	3.1/43.1
6.0V	0.13	3.9/54.2

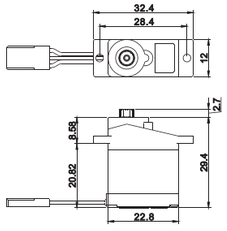
1BB Aluminum
SH-0255MG



Dimensions(mm):22.8*12.0*29.4
15.8 g | Metal

4.8V	0.16	3.1/43.1
6.0V	0.13	3.9/54.2

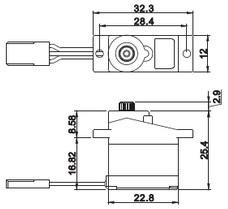
1BB Aluminum
SH-0256



Dimensions(mm):22.8*12.0*29.4
15.8 g | Metal & Plastic

4.8V	0.21	3.9/54.2
6.0V	0.16	4.6/63.9

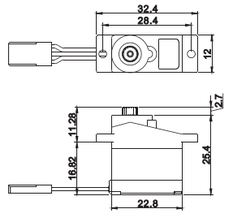
1BB Aluminum
SH-0257MG



Dimensions(mm):22.8*12.0*25.4
14.0 g | Metal

4.8V	0.13	1.8/25.0
6.0V	0.09	2.2/30.6

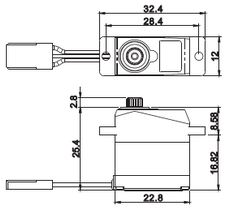
1BB Aluminum
SH-0258



Dimensions(mm):22.8*12.0*25.4
13.6 g | Matal & Plastic

4.8V	0.08	0.6/8.3
6.0V	0.06	1.0/13.9

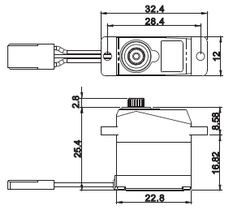
2BB Aluminum
SH-0263MG



Dimensions(mm):22.8*12.0*25.4
15.0 g | Metal

4.8V	0.13	1.8/25.0
6.0V	0.10	2.2/30.6

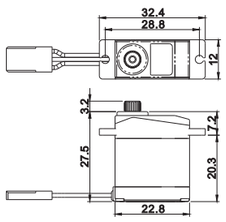
2BB Aluminum
SH-0264MG



Dimensions(mm):22.8*12.0*25.4
15.0 g | Metal

4.8V	0.08	0.8/11.1
6.0V	0.06	1.2/16.7

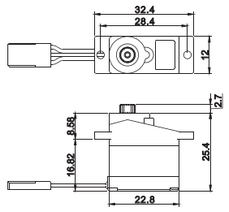
2BB Aluminum NEW
SH-0265MG



Dimensions(mm):22.8*12.0*27.5
15.0 g | Metal

4.8V	0.09	1.8/25.0
6.0V	0.075	2.4/33.3

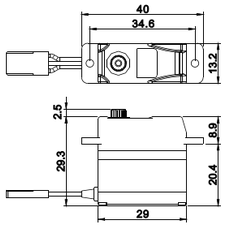
1BB Aluminum
SH-0350



Dimensions(mm):22.8*12.0*25.4
12.3 g | Industrial plastic

4.8V	0.21	2.2/30.6
6.0V	0.16	2.6/36.1

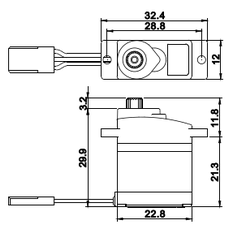
2BB Aluminum NEW
SH-1230MG



Dimensions(mm):29.0*13.2*29.3
22.0g | Metal

4.8V	0.07	1.7/23.6
6.0V	0.05	2.2/30.6

2BB Aluminum NEW
SH-1231MG



Dimensions(mm):22.8*12.0*29.9
17.0g | Metal

4.8V	0.10	2.0/27.8
6.0V	0.08	2.5/34.7

Car | Airplane | Helicopter | Boat

2BB Bearing | Aluminum Case | Speed (sec/60°) | Torque (kg-cm /oz-in) | Weight (g) | Gear

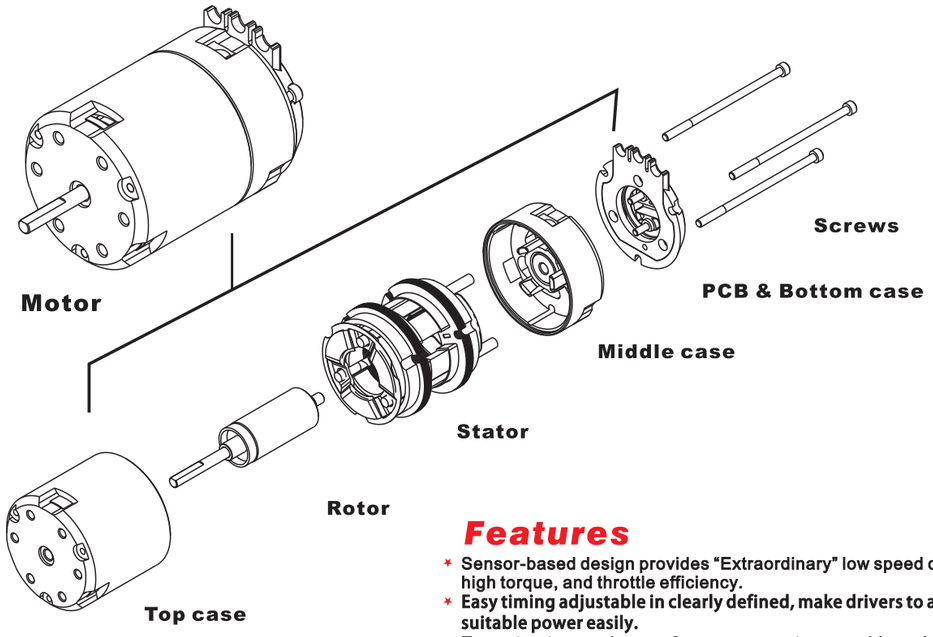
● Recommend ○ Suitable

S□-0 DC Motor
S□-1 Coreless Motor
S□-2 Brushless Motor

Digital Servo Sheet

				@4.8V		@6.0V		@7.4V				CAR			BOAT		AIRPLANE				HELI			
	Item no.	Dimension (mm)	Weight (g)	Speed: sec/60°	Torque: kg-cm/oz-in	Speed: sec/60°	Torque: kg-cm/oz-in	Speed: sec/60°	Torque: kg-cm/oz-in	Gear	Bearing	Electric car	Nitro car	Mini car	Sailboat	Boat	Airplane	Small airplane	Electric airplane	Glider	Helicopter	Nitro heli	Electric heli	Item no.
GIANT	SV-0235MG	65.8*30.0*57.4	200.0			0.18	28.0/388.8	0.15	35.0/486.1	Metal	2BB	●	●				●							SV-0235MG
	SV-0236MG	65.8*30.0*57.4	200.0			0.21	30.0/416.6	0.17	40.0/555.5	Metal	2BB	●	●				●							SV-0236MG
STANDARD	SA-1230SG	40.3*20.2*44.9	79.0	0.20	30.0/416.6	0.16	36.0/499.9			Unique steel	2BB						●		●	●				SA-1230SG
	SA-1231SG	40.3*20.2*44.9	79.0	0.18	28.0/388.8	0.14	32.0/444.4			Unique steel	2BB						●		●	●				SA-1231SG
	SA-1256TG	40.3*20.2*37.2	52.4	0.18	16.0/222.2	0.15	20.0/277.7			Titanium alloy & Aluminum	2BB	○	○				●		●	●				SA-1256TG
	SA-1258TG	40.3*20.2*37.2	52.4	0.10	9.6/133.3	0.08	12.0/166.6			Titanium alloy & Aluminum	2BB	○	○				●		●	●	○	○	○	SA-1258TG
	SA-1283SG	40.8*20.2*36.4	80.0	0.16	25.0/347.2	0.13	30.0/416.6			Unique steel	2BB	●	●				●		●					SA-1283SG
	SB-2230SG	40.3*20.2*44.9	84.0			0.16	36.0/499.9	0.13	42.0/583.3	Unique steel	2BB						●		●	●				SB-2230SG
	SB-2231SG	40.3*20.2*44.9	84.0			0.14	32.0/444.4	0.10	40.0/555.5	Unique steel	2BB						●		●	●				SB-2231SG
	SB-2270SG	40.3*20.2*38.7	69.0			0.15	25.0/347.2	0.12	32.0/444.4	Unique steel	2BB	●	●				●		●					SB-2270SG
	SB-2271SG	40.3*20.2*38.7	69.0			0.085	15.0/208.3	0.065	20.0/277.7	Unique steel	2BB	●	●				●		●		●	●	●	SB-2271SG
	SB-2272MG	40.3*20.2*38.7	66.0			0.045	5.0/69.4	0.032	7.0/97.2	Metal	2BB	●	●								●	●	●	SB-2272MG
	SB-2273SG	40.3*20.2*38.7	69.0			0.12	23.0/319.4	0.095	28.0/388.8	Unique steel	2BB	●	●		○	○	●		●		○	○	○	SB-2273SG
	SB-2274SG	40.3*20.2*38.7	69.0			0.105	20.0/277.7	0.08	25.0/347.2	Unique steel	2BB	●	●		○	○	●		●		○	○	○	SB-2274SG
	SC-0251MG	40.7*19.6*42.4	61.0	0.20	13.0/180.5	0.18	16.0/222.2			Metal	2BB	●	●		○	○	●		●					SC-0251MG
	SC-0252MG	40.7*19.6*39.4	49.0	0.23	7.2/100.0	0.19	10.5/145.8			Metal	2BB	●	●		○	○	●		●					SC-0252MG
	SC-0253MG	40.7*20.0*37.0	59.0	0.17	4.0/55.5	0.15	6.0/83.3			Metal	1BB	●	●		○	○	●		●		○	○	○	SC-0253MG
	SC-0254MG	40.7*19.6*39.4	49.0	0.19	6.2/86.1	0.14	7.2/100.0			Metal	2BB	●	●		○	○	●		●		○	○	○	SC-0254MG
	SC-0352	40.7*20.0*39.4	42.0	0.14	4.2/58.3	0.11	6.5/90.3			Industrial plastic	2BB	○	○		○	○	○	○	○	○	○	○		SC-0352
	SC-1232SG	40.3*20.2*44.9	79.0	0.15	18.0/250.0	0.13	22.0/305.5			Unique steel	2BB	●	●				●		●		○	○	○	SC-1232SG
	SC-1233SG	40.3*20.2*44.9	79.0	0.08	10.0/138.9	0.07	13.0/180.5			Unique steel	2BB	●	●				●		○		○	○	○	SC-1233SG
	SC-1251MG	40.8*20.2*25.4	44.5	0.10	7.0/97.2	0.09	9.0/125.0			Metal	2BB	●	●				●	●	●					SC-1251MG
	SC-1252MG	40.8*20.2*25.4	44.5	0.08	4.5/62.5	0.07	7.0/97.2			Metal	2BB	●	●				○		○					SC-1252MG
	SC-1256TG	40.3*20.2*37.2	52.4	0.18	16.0/222.2	0.15	20.0/277.7			Titanium alloy & Aluminum	2BB	●	●				○	○	○					SC-1256TG
	SC-1257TG	40.3*20.2*37.2	52.4	0.09	8.0/111.1	0.07	10.0/138.9			Titanium alloy & Aluminum	2BB	●	●								●	●	●	SC-1257TG
	SC-1258TG	40.3*20.2*37.2	52.4	0.10	9.6/133.3	0.08	12.0/166.6			Titanium alloy & Aluminum	2BB	●	●				○	○	○		●	●	●	SC-1258TG
	SC-1267SG	40.3*20.2*37.2	62.0			0.11	13.0/180.5	0.095	20.0/277.7	Unique steel	2BB	●	●		○	○	●		●		○	○	○	SC-1267SG
	SC-1268SG	40.3*20.2*37.2	62.0			0.13	15.0/208.3	0.11	25.0/347.2	Unique steel	2BB	●	●		○	○	●		●					SC-1268SG
	SG-0351	40.7*20.0*37.0	41.0	0.22	3.2/44.4	0.17	4.1/56.9			Industrial plastic	1BBMB	○	○		○	○	○	○	○		○	○		SG-0351
	SH-1290MG	40.3*20.2*37.2	56.4	0.06	4.0/55.5	0.05	5.0/69.4			Metal	2BB										●	●	●	SH-1290MG
	SV-0220MG	40.7*20.0*37.0	59.0			0.16	6.5/90.3	0.13	8.0/111.1	Metal	1BB	●	●		○	○	●		●		○	○	○	SV-0220MG
	SV-0320	40.7*20.0*37.0	46.0			0.16	4.5/62.5	0.13	6.0/83.3	Industrial plastic	1BB	●	●		○	○	●		●		○	○	○	SV-0320
	SV-1270TG	40.3*20.2*37.2	56.0			0.14	26.0/361.1	0.11	35.0/486.1	Titanium alloy & Aluminum	2BB	●	●				●		●					SV-1270TG
	SV-1271SG	40.3*20.2*37.2	63.0			0.11	20.0/277.7	0.08	25.0/347.2	Unique steel	2BB	●	●				○		○		●	●	●	SV-1271SG
	SV-1272SG	40.3*20.2*37.2	63.0			0.13	23.0/319.4	0.10	30.0/416.6	Unique steel	2BB	●	●				●		●		○	○	○	SV-1272SG
	SV-1273TG	40.3*20.2*37.2	56.0			0.08	14.0/194.4	0.065	16.0/222.2	Titanium alloy & Aluminum	2BB	●	●				○		○		●	●	●	SV-1273TG
	SV-1274MG	40.3*20.2*37.2	61.0			0.045	5.0/69.4	0.032	7.0/97.2	Metal	2BB										●	●	●	SV-1274TG
	SW-1210SG	40.6*20.7*42.0	71.0	0.18	16.0/222.2	0.15	20.0/277.7			Unique steel	2BB	●	●		●	●								SW-1210SG
	SW-0230MG	41.8*20.2*38.0	59.0			0.16	6.5/90.3	0.13	8.0/111.1	Metal	1BB	●	●		●	●								SW-0230MG
	SG-0210MG	30.0*33.9*10.0	18.0	0.28	2.8/38.9	0.22	3.7/51.4			Metal	2BB						○	○	○	●				SG-0210MG
MINI	SH-1250MG	35.0*15.0*29.2	29.6	0.13	3.7/51.4	0.11	4.6/63.9			Metal	2BB	●	●	●	●	●	●	●	●		●	●	●	SH-1250MG
	SH-1257MG	35.0*15.0*29.2	29.5	0.09	1.9/26.4	0.07	2.5/34.7			Metal	2BB	●									●	●	●	SH-1257MG
	SH-1350	35.0*15.0*29.2	26.0	0.13	3.7/51.4	0.11	4.6/63.9			Industrial plastic	2BB	●	●	●	●	●	●	●	●		●	●	●	SH-1350
	SH-1357	35.0*15.0*29.2	26.0	0.09	1.9/26.4	0.07	2.5/34.7			Industrial plastic	2BB	●									●	●	●	SH-1357
MICRO	SH-0253	22.8*12.0*25.4	13.6	0.13	1.8/25.0	0.09	2.2/30.6			Metal & Plastic	1BB			●			○	●	○	○	●	●	●	SH-0253
	SH-0254	22.8*12.0*29.4	15.8	0.16	3.1/43.1	0.13	3.9/54.2			Metal & Plastic	1BB			●			○	●	○		●	●	●	SH-0254
	SH-0255MG	22.8*12.0*29.4	15.8	0.16	3.1/43.1	0.13	3.9/54.2			Metal	1BB			●			○	●	○		●	●	●	SH-0255MG
	SH-0256	22.8*12.0*29.4	15.8	0.21	3.9/54.2	0.16	4.6/63.9			Metal & Plastic	1BB			●			○	●	○		●	●	●	SH-0256
	SH-0257MG	22.8*12.0*25.4	14.0	0.13	1.8/25.0	0.09	2.2/30.6			Metal	1BB			●			○	●	○	○	●	●	●	SH-0257MG
	SH-0258	22.8*12.0*25.4	13.6	0.08	0.6/8.3	0.06	1.0/13.9			Metal & Plastic	1BB										●	●	●	SH-0258
	SH-0263MG	22.8*12.0*25.4	15.0	0.13	1.8/25.0	0.10	2.2/30.6			Metal	2BB			●			●	●	●	●	●	●	●	SH-0263MG
	SH-0264MG	22.8*12.0*25.4	15.0	0.08	0.8/11.1	0.06	1.2/16.7			Metal	2BB										●	●	●	SH-0264MG
	SH-0265MG	22.8*12.0*27.5	15.0	0.09	1.8/25	0.075	2.4/33.3			Metal	2BB			○				○		○	●	●	●	SH-0265MG
	SH-0350	22.8*12.0*25.4	12.3	0.21	2.2/30.6	0.16	2.6/36.1			Industrial plastic	1BB			○				○		○				SH-0350
	SH-1230MG	29.0*13.2*29.3	22.0	0.07	1.7/23.6	0.05	2.2/30.6			Metal	2BB	○		○				○			●	●	●	SH-1230SG
	SH-1231MG	22.8*12.0*29.9	17.0	0.10	2.0/27.8	0.08	2.5/34.7			Metal	2BB			○				○		○	●	●	●	SH-1231SG

Sensored Brushless Motor Structure



Features

- Sensor-based design provides "Extraordinary" low speed drivability, high torque, and throttle efficiency.
- Easy timing adjustable in clearly defined, make drivers to adjust and find the suitable power easily.
- Easy structure- only uses 3 screws, easy to assemble and change the parts.
- Aluminum can with special design for CNC machine, light-weight design and efficiency airflow to lower the temperature.
- High-end Sintered Neodymium magnet and grade, for best efficiency and average torque.
- High quality stator minimized core loss for lowest temperature and best efficiency.
- High quality precise sensor position for best power, throttle and efficiency.

BLH-3650

BLH-3670

BLS-4069

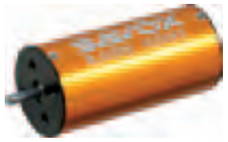
BLS-3661S

BLS-3661

BLS-3650S

BLS-3650

BLS-2856

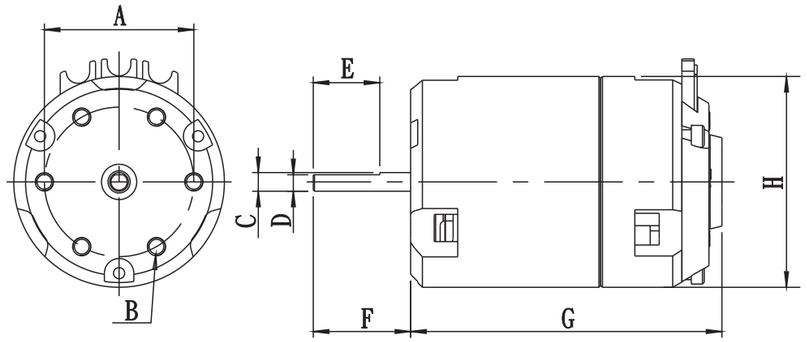


BLS-2836

BLS-2040

BLS-2030

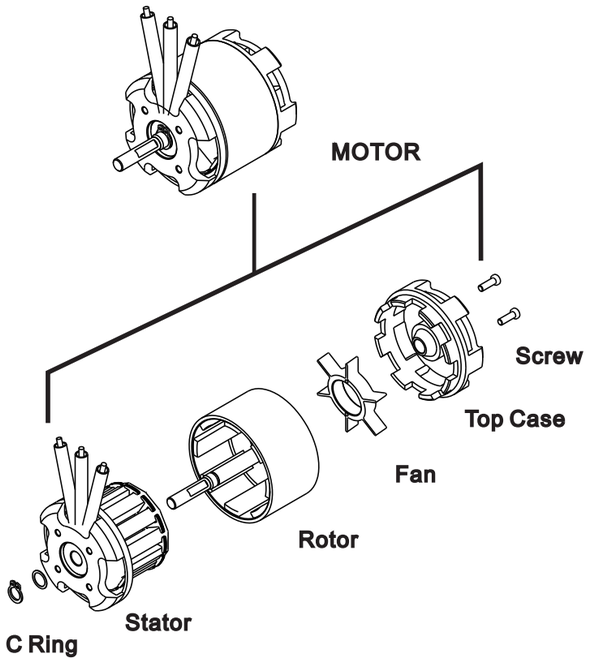
BLS-2236



Brushless Inner Runner Motor

Item no.	RPM/V (KV)	Dimension (mm)	Shaft size (mm)	Max. current (A)	Max. power (W)	Weight	Voltage	A	B	C	D	E	F	G	H
BLH-3670	4600	Ø 35.8 * 70.0 (Ø 1.41" * 2.76")	Ø 5.00 * 76.46	77	924	250.0g (8.82oz)	4-10 NiCd/NiMH 2-3s LiPo	Ø 25.4	M3*0.5p	Ø 5	4.5	12.2	16.35	70	35.8
BLH-3650	8000 6400 5600 4900 4400 3900 3550 2950 2200 1800 1600	Ø 35.8 * 52.9 (Ø 1.41" * 2.08")	Ø 3.17 * 59.43	79 65 55 50 48 45 42 33 25 20 18	584 481 407 370 355 333 310 244 185 148 133	180.0g (6.4oz)	4-6 NiCd/NiMH 2s LiPo	Ø 25.4	M3*0.5p	Ø 3.175	2.8	11.3	16.55	52.9	35.8
BLS-4570	1800	Ø 45.0 * 71.0 (Ø 1.77" * 2.80")	Ø 5.00 * 88.00	50	1110	539.0g (19.0oz)	4-12 NiCd/NiMH 2-6s LiPo	Ø 25	M3*0.5p	Ø 5	4.5	12.2	19.3	71	45
BLS-4069	2000	Ø 40.0 * 70.0 (Ø 1.57" * 2.76")	Ø 5.00 * 87.00	65	1443	448.8g (15.8oz)	4-12 NiCd/NiMH 2-6s LiPo	Ø 25.4	M4*0.7p	Ø 5	4.5	12.2	19.3	70	40
BLS-3661S	1500 3000 5000	Ø 36.0 * 61.0 (Ø 1.42" * 2.40")	Ø 3.17 * 76.00 Ø 5.00 * 76.00	40 50 67	592 740 991	242.5g (8.6oz)	4-12 NiCd/NiMH 2-4s LiPo	Ø 25	M3*0.5p	Ø 5	4.5	13	21	61	36
BLS-3661	3000 4000	Ø 36.0 * 61.0 (Ø 1.42" * 2.40")	Ø 5.00 * 76.00	45 55	666 814	285.3g (10.1oz)	4-12 NiCd/NiMH 2-4s LiPo	Ø 25.3	M3*0.5p	Ø 3.17 or Ø 5	4.5	13	16.35	61	36
BLS-3650S	3600	Ø 36.0 * 50.0 (Ø 1.42" * 1.97")	Ø 3.17 * 63.40	35	504	200.0g (7.1oz)	4-12 NiCd/NiMH 2-3s LiPo	Ø 25.3	M3*0.5p	Ø 3.17	2.9	13	15.15	50	36
BLS-3650	3000 3500 4000 5000 7000	Ø 36.0 * 50.0 (Ø 1.42" * 1.97")	Ø 3.17 * 62.80 Ø 5.00 * 62.80	45 45 45 60 68	648 648 648 864 979	221.2g (7.8oz)	4-12 NiCd/NiMH 2-3s LiPo	Ø 25.3	M3*0.5p	Ø 3.17 or Ø 5	2.87	12.2	15.15	49	36
BLS-2856	1500 3000 5000	Ø 28.0 * 56.0 (Ø 1.10" * 2.20")	Ø 3.17 * 65.60	16 25 35	230 360 504	167.2g (5.9oz)	4-12 NiCd/NiMH 2-3s LiPo	Ø 16 or Ø 19	M3*0.5p	Ø 3			10	56	27.6
BLS-2836	3000 3700 5000	Ø 28.0 * 36.0 (Ø 1.10" * 1.42")	Ø 2.30 * 48.30 Ø 3.17 * 48.30	15 16 25	166 177 277	91.0g (3.2oz)	4-8 NiCd/NiMH 2-3s LiPo	Ø 16 or Ø 19	M3*0.5p	Ø 3.17	2.9	8	12.7	36	27.6
BLS-2236	3000	Ø 22.0 * 36.0 (Ø 0.87" * 1.42")	Ø 2.00 * 46.00	13	144	53.0g (1.87oz)	4-8 NiCd/NiMH 2-3s LiPo	Ø 12.5 or Ø 14 or Ø 16	M2.5*0.45p	Ø 2	1.8	8	10.8	36	22
BLS-2040	2250 3000 3700 4200 5000 7000	Ø 20.0 * 40.0 (Ø 0.79" * 1.57")	Ø 2.30 * 54.30	9 12 13 14 15 17	99 133 144 155 166 188	65.6g (2.3oz)	4-8 NiCd/NiMH 2-3s LiPo	Ø 16	M2.5*0.45p	Ø 2.3			12.8	42	20
BLS-2030	3700 4000 5000 6000 7000	Ø 20.0 * 30.0 (Ø 0.79" * 1.18")	Ø 2.30 * 44.30	7 8 9 10 11	77 88 99 111 122	46.1g (1.6oz)	4-8 NiCd/NiMH 2-3s LiPo	Ø 16	M2.5*0.45p	Ø 2	1.7	8	10.81	34	20

Brushless Outer Runner Motor



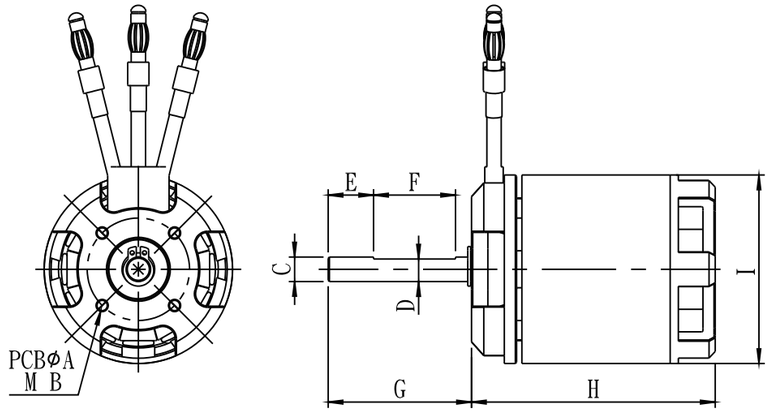
- Unique cooling system design (Savox patent) Machined aluminum housing with 6 angled cooling holes and add cooling fan into our motor that help to pump air through the motor while it runs the temperature is 10% lower than others.
- Durable black Electro-Coat finish on the flux ring. Our logo and item number all made by high technical of laser print on each motor instead of using a sticker to help maintain the balance of the motor.
- High quality stator plates are epoxy coated on the inner surface to prevent winding shorts. 0.20mm stator plates are used on the our motors.
- High temperature 180℃ (356℉) rated wire is used for winding the burning up the motor. The motors are also machine wound to ensure consistant winds.
- High quality shielded and ball bearings are used to support the shaft in all our motors.
- High temperature adhesives are used to secure the stator windings and prevent them from shifting and getting pinched or shooting out.

BSM-4750

BSM-4050

BSM-3750

BSM-2940



BSM-6364

BSM-5055

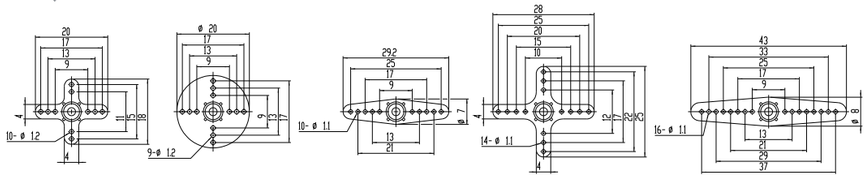
BSM-4760

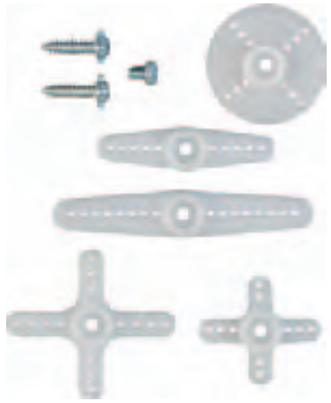
Item no.	RPM/V (KV)	Dimension (mm)	Shaft size (mm)	Max. current (A)	Max. power (W)	Weight	Voltage	A	B	C	D	E	F	G	H	I
BSM-6364 pro	440	Ø 63.0 * 64.0 (Ø 2.48" * 2.52")	Ø 6.00 * 114.0	95	4200	759.0g (26.77oz)	3-12s LiPo	Ø 30	M4x0.7P x4	Ø 6	5.5	20	15	50	64	Ø63
BSM-5065 pro	450 500 530	Ø 50.0 * 63.5 (Ø 1.97" * 2.5")	Ø 6.00 * 109.5	97 100 95	4200 4400 4200	454.0g (16.1oz)	3-12s LiPo 3-12s LiPo 3-12s LiPo	Ø 30	M4x0.7P x4	Ø 6	5.5	29.4	15	46	63.5	Ø50
BSM-5055 pro	550	Ø 50.0 * 53.2 (Ø 1.97" * 2.09")	Ø 6.00 * 88.2	95	4000	363.0g (12.8oz)	3-12s LiPo	Ø 25	M3x0.5P x4	Ø 6	5.5	11.1	20	35	53.2	Ø50
BSM-4760 BSM-4760 pro	500 530 1200	Ø 46.0 * 59.5 (Ø 1.81" * 2.34")	Ø 6.00 * 94.5	83 70 134	3560 3000 2780	358.0g (12.63oz)	3-12s LiPo 3-12s LiPo 3-6s LiPo	Ø 25	M3x0.5P x4	Ø 6	5.5	11.1	20	35	59.5	Ø46
BSM-4750 BSM-4750 pro	1200 1200	Ø 46.0 * 49.5 (Ø 1.81" * 1.95")	Ø 5.00 * 84.5 Ø 5.00 * 84.5	104 104	2200 2200	270.0g (9.52oz)	3-6s LiPo 3-6s LiPo	Ø 25	M3x0.5P x4	Ø 5	4.7	11.1	20	35	49.5	Ø46
BSM-4050 pro	1200 1300	Ø 40.0 * 48.1 (Ø 1.57" * 1.89")	Ø 5.00 * 73.1	99 90	2100 1900	215.0g (7.58oz)	3-6s LiPo 3-6s LiPo	Ø25	M3x0.5P x4	Ø5	4.4	0	15	25	48.1	Ø40
BSM-3750 pro	1200 1300	Ø 37.0 * 50.0 (Ø 1.46" * 1.97")	Ø 5.00 * 71.0	99 90	2100 1880	184.0g (6.49oz)	3-6s LiPo 3-6s LiPo	Ø25	M3x0.5P x4	Ø5	4.4	0	15	21	50	Ø37
BSM-2940 BSM-2940 pro	3500 3500	Ø 29.0 * 37.65 (Ø 1.14" * 1.48")	Ø 3.5 * 53.15 Ø 3.5 * 53.15	51 51	538 538	71.0g (2.5oz)	2-4s LiPo 2-4s LiPo	Ø 19 Ø 16	M3x0.5P M3x0.5P	Ø3.5	-	0	0	15.5	37.65	Ø29

Accessaries

Horn set List

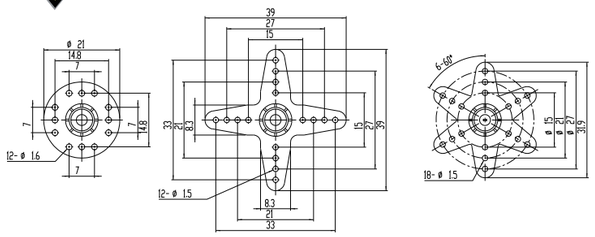
SH-11M

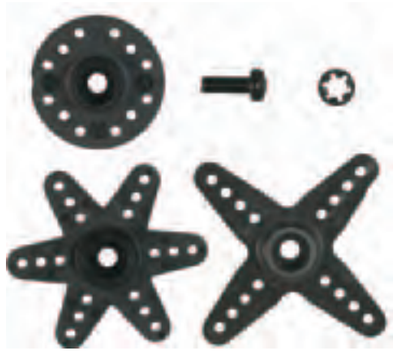




Full set
(applicable to both SH-0255MG/SH-0257MG, SH-0263MG, SH-0264MG)

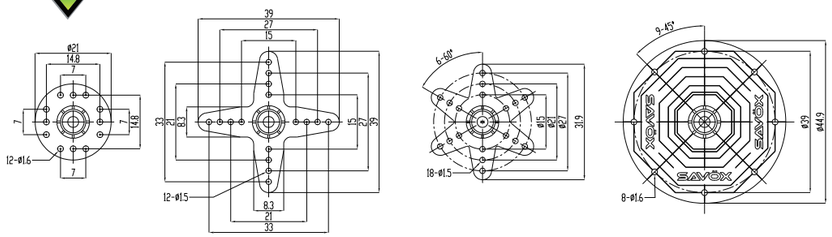
SH-20M





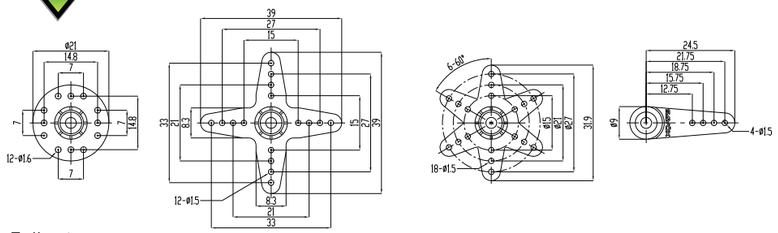
Full set
(applicable to SC-0251MG, SC-0252MG, SC-0253MG, SC-0254MG, SC-1257TG, SC-1258TG, SC-1267SG, SC-1268SG, SV-0220MG)

SH-21M



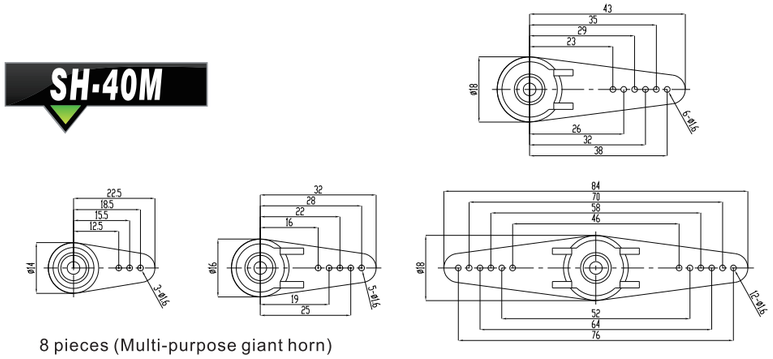
Full set
(applicable to SC-1232SG, SC-1233SG, SC-1256TG, SC-1257TG, SC-1258TG,SC-1267SG, SC-1268SG, SA-1283SG, SB-2270SG, SB-2271SG, SB-2272MG, SB-2273SG, SB-2274SG, SH-1290MG, SV-1270TG, SV-1271SG, SV-1272SG, SV-1273TG, SV-1274MG)

SH-22M



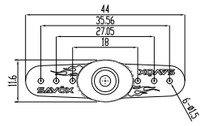
Full set
(applicable to SC-0251MG, SC-0252MG, SC-0254MG, SC-1256TG, SC-1257TG , SC-1258TG, SH-1250MG, SH-1257MG)

SH-40M



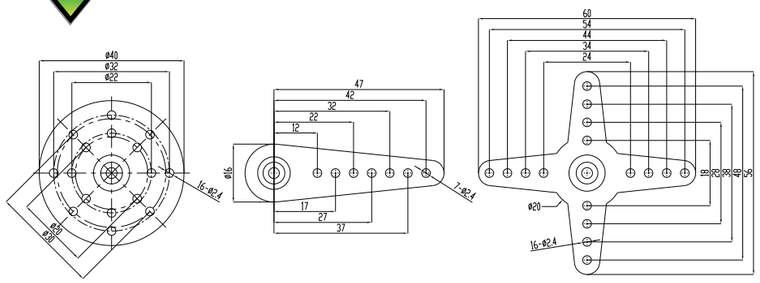
8 pieces (Multi-purpose giant horn)

SH-50M



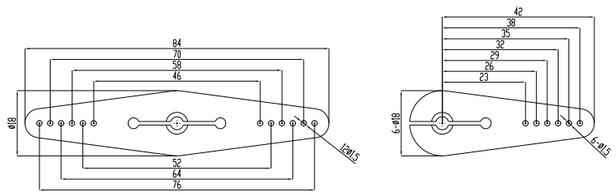
2 pieces
(recommended for large torque servo installed in cars)

SH-60M



Full set
(applicable to both SV-0235MG/SV-0236MG)

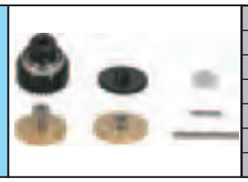
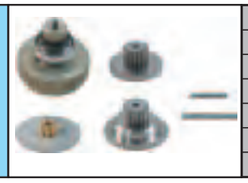
SH-80M



Aluminum horn
(recommended for large torque servo installed in airplane)

Accessaries
Servo Parts

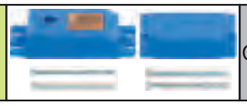
Gear Set

Category	Product	Item no.
Metal		SGSH-0255 SGSH-0257 SGSH-0261 SGSH-0262 SGSH-0263 SGSH-0264 SGSH-0265
Metal & Plastic		SGSH-0253 SGSH-0254 SGSH-0256 SGSH-0258
Plastic		SGSH-0350
Metal		SGSH-1250 SGSH-1257
Plastic		SGSH-1350 SGSH-1357
Unique steel		SGSC-1267 SGSC-1268 SGSA-1283 SGSA-1230 SGSA-1231 SGSC-1232 SGSC-1233 SGSB-2270 SGSB-2271 SGSB-2273 SGSB-2274 SGSV-1271 SGSV-1272 SGSW-1210
Titanium alloy & Aluminum		SGSC-1256 SGSA-1256 SGSC-1257 SGSC-1258 SGSA-1258 SGSV-1270 SGSV-1273
Metal		SGSC-1251 SGSC-1252 SGSH-1290 SGSB-2272 SGSV-1274 SGSC-0253 SGSV-0220 SGSW-0230 SGSC-0251 SGSC-0252 SGSC-0254
Plastic		SGSC-0352 SGSG-0351 SGSV-0320
Metal		SGSV-0235 SGSV-0236

Case Set

Category	Product	Item no.
Micro Servo(1)		CASE-SH-0350 CASE-SH-0253 CASE-SH-0254 CASE-SH-0255 CASE-SH-0256 CASE-SH-0257 CASE-SH-0258
Micro Servo(2)		CASE-SH-0263 CASE-SH-0264
Micro Servo(3)		CASE-SH-0265
Mini Servo		CASE-SH-1250 CASE-SH-1257 CASE-SH-1350 CASE-SH-1357
Standard Servo		CASE-SC-1256 CASE-SA-1256 CASE-SC-1257 CASE-SC-1258 CASE-SA-1258
Standard with water resistant (1)		CASE-SH-1290

Case Set

Category	Product	Item no.
Standard with water resistant (2)		CASE-SC-1267 CASE-SC-1268 CASE-SV-1270 CASE-SV-1271 CASE-SV-1272 CASE-SV-1273 CASE-SV-1274 CASE-SC-1232 CASE-SC-1232 CASE-SA-1230 CASE-SA-1231 CASE-SB-2270 CASE-SB-2271 CASE-SB-2272 CASE-SB-2273 CASE-SB-2274 CASE-SC-1251 CASE-SC-1252
Standard Servo		CASE-SC-0251 CASE-SC-0252 CASE-SC-0254 CASE-SC-0253 CASE-SC-0352 CASE-SG-0351 CASE-SV-0220 CASE-SV-0320
Aluminum top case		CASE-SA-1283
Waterproof servo		CASE-SW-1210
Waterproof servo		CASE-SW-0230
1/5 Servo		CASE-SV-0235 CASE-SV-0236

Rubber Set

Category	Product	Item no.
Miniservo rubber set		SP-02-01
Standard Servo rubber set (for air)		SP-01-01 SP-05-01
Standard Servo rubber set (for car)		SP-03-01 SP-06-01
1/8 aluminum spacer (for car)		SP-08-01
1/5 Servo rubber set		SP-10-01

JJ Wang

15 Years Old Top Chinese-American Driver

Shanghai 1/8 GP Champion
Beijing International Race 1/10 GP Champion
Hobby Pro Hong Kong 1/8 GP Runner-Up
US Byrons Challenge 1/10 GP 3rd Place
US Timezone Modified 1/10 EP Touring Runner-Up
SB-2270SG, SB-2271SG, SC-1252MG, SC-1258TG

Brushless Outer Runner Motor

Shaft Kit

OMA-2940 Motor shaft kit (Ø3.5 or Ø3.17mm)
OMA-3750 Motor shaft kit (Ø5mm)
OMA-4050 Motor shaft kit (Ø5mm)
OMA-4750 Motor shaft kit (Ø6mm)
OMA-4760 Motor shaft kit (Ø6mm)
OMA-5055 Motor shaft kit (Ø6mm)
OMA-5065 Motor shaft kit (Ø6mm)
OMA-6364 Motor shaft kit (Ø8 or Ø6mm)

Bearing kit

OMA-2940 Bearing kit
OMA-3750 Bearing kit
OMA-4050 Bearing kit
OMA-4750 Bearing kit
OMA-4760 Bearing kit
OMA-5055 Bearing kit
OMA-5065 Bearing kit
OMA-6364 Bearing kit

C-Clips kit

OMA-2940 C-Clip kit
OMA-3750 C-Clip kit
OMA-4050 C-Clip kit
OMA-4750 C-Clip kit
OMA-4760 C-Clip kit
OMA-5055 C-Clip kit
OMA-5065 C-Clip kit
OMA-6364 C-Clip kit

Brushless Inner Runner Motor

Shaft Kit

Modified Spec Rotor
22IHA3650K02 with spacer (Ø12.5mm)
22IHA3650E02 without spacer (Ø12.3mm)
22IHA3650E24# with spacer (Ø13mm)
22IHA3650G24# with spacer (Ø12mm)

Stock Spec Rotor
22IHA3650I24 with spacer (Ø12.5mm)
22IHA3650A24 without spacer (Ø12.3mm)
22IHA3650F24# with spacer (Ø13mm)
22IHA3650H24# with spacer (Ø12mm)

Bearing kit

IHA-3650 (R-2ZZ) Bearing kit

Sensor Wire

IHA3650(Length: 100mm)

Sensor Assembly

IHA3650 (Sensor set)

Small Parts set

Plastic end cover、Screw、
Timing controller

FLEXFIT CAP

T-SHIRT

Size:XS-XXXL

LONG-SHIRT

Size:XS-XXXL

LANYARD