



# Wide Voltage Mini Coreless Digital Servo

## Particular Specification

Item No	BMS-207WV (Newest Case / Housing)
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### 1. Electrical Specification (Function Of The Performance)

1-1	Torque @ 3.7V	3.3 kg-cm / 45.8 oz-in
1-2	Torque @ 6.0V	5.4 kg-cm / 75.0 oz-in
1-3	Torque @ 7.4V	6.6 kg-cm / 91.7 oz-in
1-4	Torque @ 8.4V	7.5 kg-cm / 104.2 oz-in
1-5	Speed @ 3.7V	0.09 sec / 60°
1-6	Speed @ 6.0V	0.07 sec / 60°
1-7	Speed @ 7.4V	0.06 sec / 60°
1-8	Speed @ 8.4V	0.05 sec / 60°

### 2. Apply Environmental Condition

2-1	Operating Voltage Range	3.7V ~ 8.5V ( 1S or 2S Li-Poly & 2S Li-Fe)
2-2	Operating Temperature Range	-20°C ~ +60°C ( -4°F ~ +140°F )
2-3	Application / Suitable	3D Aircraft, F3K, F3P & DLG, HLG, Heli 250/450Class Cyclic, 1/12th On-Road.

### 3. Control Specification

3-1	Control System	Digital Controller 12-Bits ( 4096 Steps ) / Frequency : 250Hz / Neutral : 1520us
3-2	Dead Bend Width	0.002ms (2us)
3-3	Frame Rate (Signal repeat rate)	3ms (Maximum)
3-4	Rotating Direction	Clockwise / When Pulse Traveling 1500 ~ 2100u second
3-5	Operating Travel	90° (When 1100 ~ 1900 μ sec) [ Maximum : 900us ~ 2100us ]

### 4. Mechanical Specification

4-1	Ball Bearing	Dual
4-2	Gears Type	All Metal Gears
4-3	Motor Type	Coreless Motor
4-4	Outside Case	Industry Plastic
4-5	Horn / Gear Spline	25 Teeth ( Same as F-Type )
4-6	Connected Cable Length	150 mm (5.9 in)
4-7	Connected Housing	Universal Connector ( J-Type )

### 5. Outline Drawing

5-1	Dimension (mm)	23 x 12 x 27.5 mm / 0.9 x 0.47 x 1.08 in
5-2	Weight (gram)	17.5 ± 0.5 grams / 0.62 oz

5-3	Product Picture / Dimension Sketch	
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