



HIGH PERFORMANCE DIGITAL SERVOS

Servo Name/Number: MG2107WHV 6.6Kg.cm/0.10s High Voltage Wing Servo

Environmental Conditions:

Storage Temperature	-20°C ~ 60°C
Operating Temperature	-10°C ~ 50°C
Operating Voltage	5.0V ~ 8.4V

Test Environment:

Standard Test Environment	Each check must be a normal temperature and humidity measurement, temperature degree $25 \pm 5^\circ\text{C}$, relative humidity $65 \pm 10\%$, in accordance with this specification judge characteristics under standard test conditions.
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Visual Inspection:

Physical Dimensions	25.8 x 8 x 34.3mm
Exterior/Appearance	No damage, not allowed to affect the function
Lifetime	>200000 times/load (sub/load)

Electrical Specification:

	5.0V	6.0V	7.4V	8.4V
Operating Speed (No load)	0.18s/60°	0.15s / 60°	0.12s / 60°	0.10s / 60°
Running Current (No load)	100mA	180mA	200mA	220mA
Stall Torque	3.8kg.cm	4.7kg.cm	6.0kg.cm	6.6kg.cm
Stall Current	1.3A	1.6A	1.9A	2.1A
Idle Current	10mA	10mA	10mA	10mA

Mechanical Specification:

Overall Dimensions	25.8 x 8 x 34.3mm
Limit Angle	360°
Weight	21g \pm 1g
Connector Wire Gauge	#26 AWG
Connector Wire Length	300 \pm 5 mm
Spline	Unique (non-standard)/Exclusive
Reduction Ratio	299:1
Motor	Coreless
Angle Sensor	Potentiometer
Bearing	2BB
Gear	Metal
Case	Full Metal
Waterproof	No

Mechanical Specification (Cont'd):

Positive Pole	Red
Negative Electrode	Brown
Signal	Yellow

Control Specification:

Control System	Change the pulse width
Amplifier Type	Digital Controller
Operating Travel	90° (at 1000 → 2000μsec)
Neutral Position	1500μsec
Dead Band Width	2μsec
Rotating Direction	Counterclockwise (at 1500 → 2000μsec)
Pulse Width Range	800 → 2200μsec
Maximum Travel	About 150° (at 800 → 2200μsec)

