



HIGH PERFORMANCE DIGITAL SERVOS

Servo Name/Number: MGB6928HV 28Kg/0.06s Brushless High Voltage 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.
---------------------------	---

Visual Inspection:

Physical Dimensions	40 x 20 x 40.9mm
Exterior/Appearance	No damage, not allowed to affect the function

Electrical Specification:

	5.0V	6.0V	7.4V	8.4V
Operating Speed (No load)	0.10s/60°	0.08s / 60°	0.07s / 60°	0.06s / 60°
Running Current (No load)	70mA	90mA	160mA	220mA
Stall Torque	20kg.cm	22.2kg.cm	25kg.cm	28kg.cm
Stall Current	2.1A	2.5A	2.9A	3.5A
Idle Current	16mA	16mA	20mA	20mA

Mechanical Specification:

Overall Dimensions	40 x 20 x 40.9mm
Limit Angle	180°
Weight	69g \pm 1g
Connector Wire Gauge	#22 PVC
Connector Wire Length	300 \pm 5 mm
Spline	Ø5.90 25T
Reduction Ratio	215:1
Motor	Brushless
Angle Sensor	Potentiometer
Bearing	2BB
Gear	Steel Gear
Case	Full Metal
Waterproof	Yes

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)

