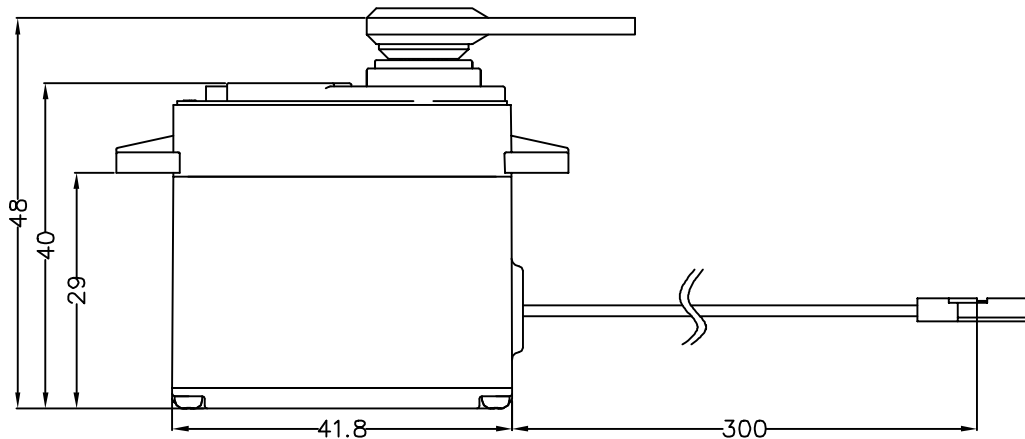
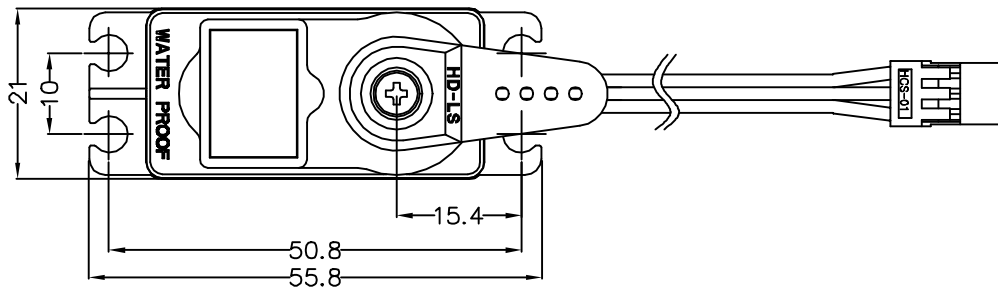


# GENERAL SPECIFICATION OF HS-646WP ULTRA TORQUE WATER PROOF SERVO

## 1. TECHNICAL VALUE

CONTROL SYSTEM	: +PULSE WIDTH CONTROL 1500usec NEUTRAL	
OPERATING VOLTAGE RANGE	: 6.0V TO 7.4V	
OPERATING TEMPERATURE RANGE	: -20°C TO +60°C (-4°F TO +140°F)	
TEST VOLTAGE	: AT 6.0V	AT 7.4V
OPERATING SPEED	: 0.20sec/60° AT NO LOAD	0.17sec/60° AT NO LOAD
STALL TORQUE	: 9.6kg.cm(133.32oz.in)	11.6kg.cm(161.09oz.in)
STANDING TORQUE	: -	-
IDLE CURRENT	: 8mA AT STOPPED	8mA AT STOPPED
RUNNING CURRENT	: 400mA/NO LOAD RUNNING	600mA/NO LOAD RUNNING
STALL CURRENT	: 2000mA	2200mA
DEAD BAND WIDTH	: 4usec	4usec
OPERATING TRAVEL	: 40±5°/ONE SIDE PULSE TRAVELING 400usec	
DIRECTION	: CLOCK WISE/PULSE TRAVELING 1500 TO 1900usec	
MOTOR TYPE	: 3-POLE FERRITE CORED CARBON BRUSH	
POTENTIOMETER TYPE	: 4 SLIDER/1M CYCLE LONG LIFE/INDIRECT DRIVE	
AMPLIFIER TYPE	: HT7003 ALALOG AMPLIFIER WITH TRANSISTOR DRIVE	
DIMENSIONS	: 41.8x21.0x40.0mm(1.65x0.83x1.57in)	
WEIGHT	: 60g(2.12oz)	
BALL BEARING	: DUAL/MR106	
GEAR MATERIAL	: 3 Metal gears & 1 MP first gear	
HORN GEAR SPLINE	: 24 SEGMENTS/φ5.76	
SPLINED HORNS	: HEAVY DUTY/HD-IS, HD-O, HD-LS, HD-IL, HD-LL	
CONNECTOR WIRE LENGTH	: 300mm(11.81in)	
CONNECTOR WIRE STRAND COUNTER	: 60EA	
CONNECTOR WIRE GAUGE	: 22AWG	
Duration of the test in water	: 30min	



## 2. FEATURES

- IP67 WATER PROOF
- DURABLE METAL GEARS WITH BALL BEARING
- ULTRA TORQUE
- HEAVY DUTY SPLINED HORNS

## 3. APPLICATIONS

- 60 HELICOPTERS
- GAS & ELECTRIC CARS
- BOATS