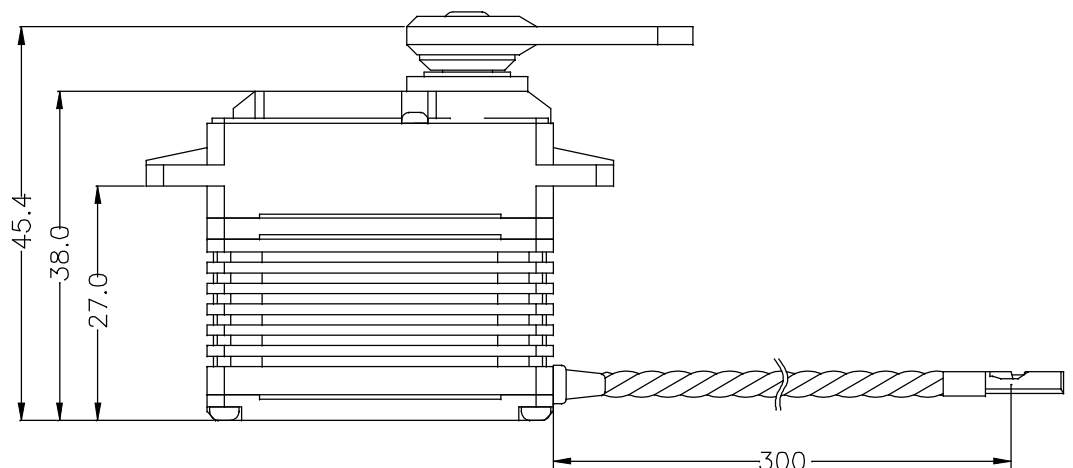
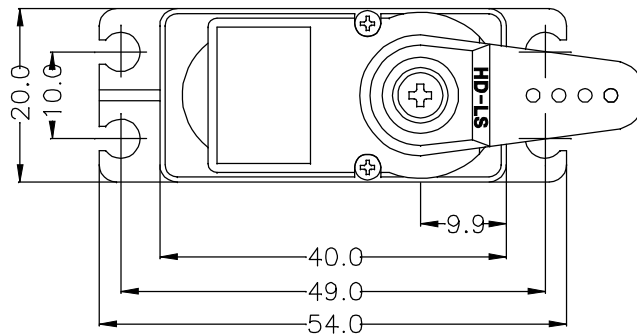


# ANNOUNCED SPECIFICATION OF HS-7950TH ULTRA TORQUE DIGITAL SERVO

## 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               | :0.15sec/60° AT NO LOAD                           | 0.13sec/60° AT NO LOAD |
| STALL TORQUE                  | :29.0kg.cm(402.73oz.in)                           | 35.0kg.cm(486.05oz.in) |
| STANDING TORQUE               | :—  | —                      |
| IDLE CURRENT                  | :10mA/NO LOAD RUNNING                             | 10mA AT STOPPED        |
| RUNNING CURRENT               | :390mA/NO LOAD RUNNING                            | 500mA/NO LOAD RUNNING  |
| STALL CURRENT                 | :4,800mA  | 6,200mA                |
| DEAD BAND WIDTH               | :1usec  | 1usec                  |
| OPERATING TRAVEL              | :40±5°/ONE SIDE PULSE TRAVELING 400usec           |                        |
| DIRECTION                     | :CLOCK WISE/PULSE TRAVELING 1500 TO 1900usec      |                        |
| MOTOR TYPE                    | :CORELESS METAL BRUSH                             |                        |
| POTENTIOMETER TYPE            | :4 SLIDER/1M CYCLE LONG LIFE/INDIRECT DRIVE       |                        |
| AMPLIFIER TYPE                | :ATMEGA48 MCU DIGITAL AMPLIFIER WITH MOSFET DRIVE |                        |
| DIMENSIONS                    | :40x20x38mm(1.57x0.79x1.50in)                     |                        |
| WEIGHT                        | :68g(2.40oz)                                      |                        |
| BALL BEARING                  | :DUAL/MR106                                       |                        |
| GEAR MATERIAL                 | :1 METAL-PLASTIC & 3 TITANIUM ALLOY               |                        |
| HORN GEAR SPLINE              | :24 SEGMENTS/ø5.76                                |                        |
| SPLINED HORNS                 | :HEAVY DUTY/HD-IS, HD-O, HD-LS, HD-IL, HD-LL      |                        |
| CONNECTOR WIRE LENGTH         | :300mm(11.81in)                                   |                        |
| CONNECTOR WIRE STRAND COUNTER | :80EA   |                        |
| CONNECTOR WIRE GAUGE          | :20AWG  |                        |



## 2. FEATURES

- PROGRAMMABLE DIGITAL AMPLIFIER WITH MOSFET DRIVE
- DURABLE TITANIUM ALLOY METAL GEARS WITH DUAL BALL BEARING
- ULTRA HARDNESS GEAR SHAFT WITH 3 AXIAL METAL BUSHING
- WATER & DUST RESISTANT
- HEAT SINK FOR MOTOR

## 3. APPLICATIONS

- LARGE AIR PLANE MODELS